

Ulead[®] VIDEOSTUDIO[™] 6

*User Guide
Ulead Systems, Inc.
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Sample files

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The big picture

Digital video editing used to be dominated only by professionals. Advances in technology, however, made it possible for almost anyone to create desktop video productions even at home. As personal computers become increasingly powerful, video editing software also become smarter.

Ulead VideoStudio puts you at the cutting edge of video technology by providing a complete set of tools to cut, mix, run titles, add special effects, and do almost anything digitally possible with your work. Even novices achieve professional results as VideoStudio turns the complex process of video editing into a simple and fun affair.

An introduction to digital video

Tens of millions of camcorders and personal computers have been sold around the world and video capture cards serve as the connection between the two. These cards allow the transfer of video data from the camcorder to the computer hard disk.

The introduction of the IEEE 1394 interface technology also known as FireWire or i.Link and the emergence of a generation of entirely digital camcorders and a new format to emerged - digital video (DV).

VideoStudio fully supports digital video (DV) editing and puts all the advantages of working with this format in your hands.



DV camcorders are compact and simple to operate



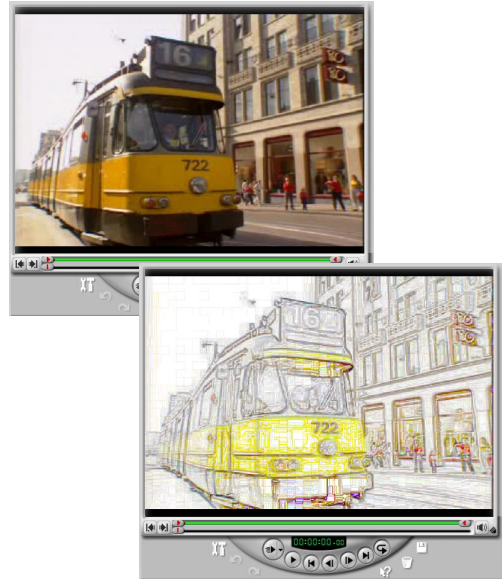
VideoStudio lets you output your video projects in a wide range of storage media

Key features of DV

Digital video boasts of excellent lossless quality since its data is processed in purely digital form. Its viewing area is large at 720x480 pixels, with more than 500 lines of horizontal resolution and PCM 16 / 12 -bit stereo sound. This means sharper images, more vibrant colors, and crisp CD quality audio.

Digital video data can be controlled and manipulated more accurately than analog signals. This makes it easier for you to apply modifications, transitions, and special effects to specific segments or even to a single frame.

And of course, portability is a major advantage of digital video as DV camcorders and tapes are more compact and lightweight to carry around compared to their analog counterparts.



Apply digital effects in VideoStudio with one click of a button

Analog to digital

VideoStudio also supports analog video to allow you to convert video from old High-8, 8 mm, VHS, and S-VHS tapes to digital compact discs.

Use an analog capture card to digitize footage from analog devices. Once digitized, you can edit these footage in your computer and output them in a format of your choice.



An introduction to MPEG

The Moving Picture Experts Group (MPEG) defined a series of standards for compressing or reducing the file size of video to make it easier for computers to handle.

VideoStudio allows you to work with both MPEG-1 and MPEG-2 formats to create VCD and DVD movies with amazing frame-accurate technology.

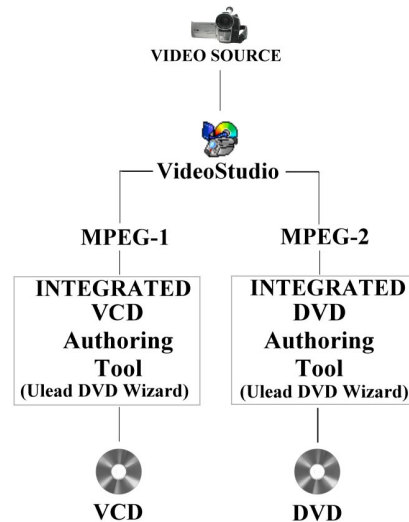
MPEG-1

Also known as the White Book standard, MPEG-1 gives you VHS quality video which you can burn to a CD and play back using a regular CD player. Popularly known as the VCD format, MPEG-1 enables more than 70 minutes of good quality video and audio to be stored on a single CD-ROM disc.

MPEG-2

A standard for coding video at higher data rates and in an interlaced format, MPEG-2 allows multi-channel sound recording and enables a resolution four times greater than MPEG-1. It is optimized for higher-end applications such as satellite broadcast and DVD.

Note: MPEG-4, a more recent development, allows video and sound recorded by cameras and microphones to work smoothly with their computer-generated counterparts.



How VideoStudio works

VideoStudio follows a step-by-step paradigm so that editing tasks remain uncomplicated from start to finish. VideoStudio also offers more than a hundred transition effects, professional titling capabilities and simple soundtrack creation tools. Learn in seconds, create in minutes.

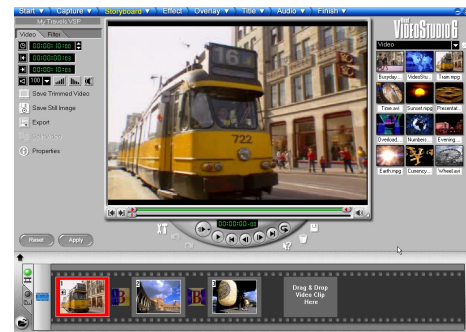
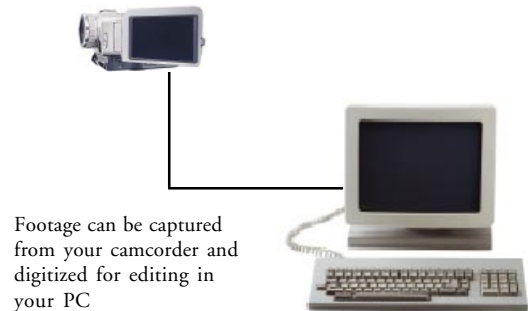
VideoStudio breaks up your movie into separate tracks, giving you broad creative freedom. Changes to one track do not affect others.

After transferring footage from your camcorder, you can arrange scenes, apply special effects, overlay images, add animated titles, sync in a voiceover narration, and use background music from your favorite CDs in formats such as WAV and MP3. All these can be done using drag-and-drop, cut-and-paste, or select-and-apply operations.

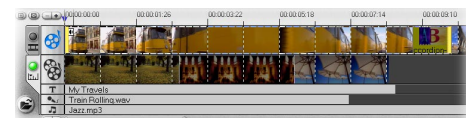
All the tracks in your movie are then organized into a video project file (*.VSP), which contains all the video and audio information on how your movie is put together.

When everything is all set to go, your computer collects all information needed to create your final movie file. This process is called rendering.

You can then output and distribute your movie as a DVD/VCD/SVCD title, streaming Web page video, or an e-mail attachment. You can also record your movie back to your camcorder or VCR.



The VideoStudio workspace

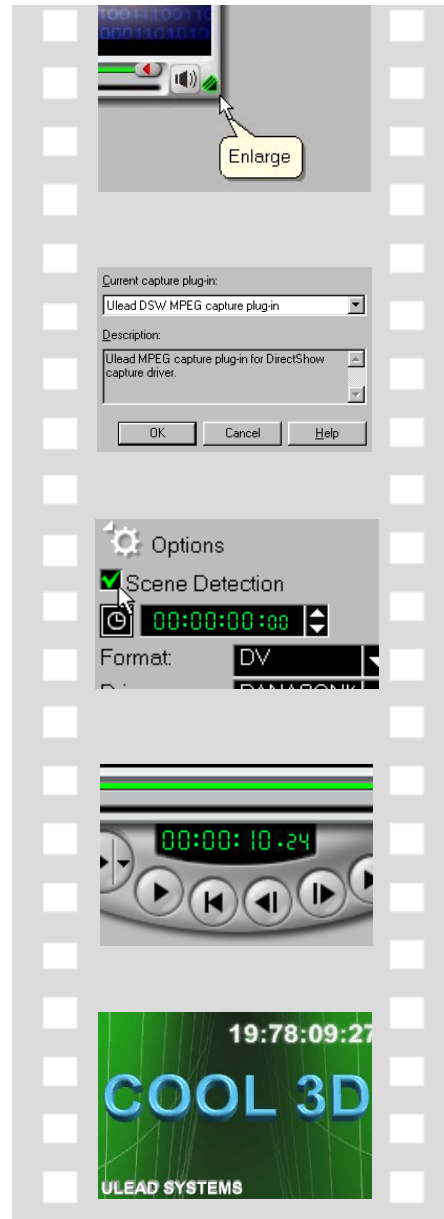


Components of a finished project as displayed in Timeline Mode

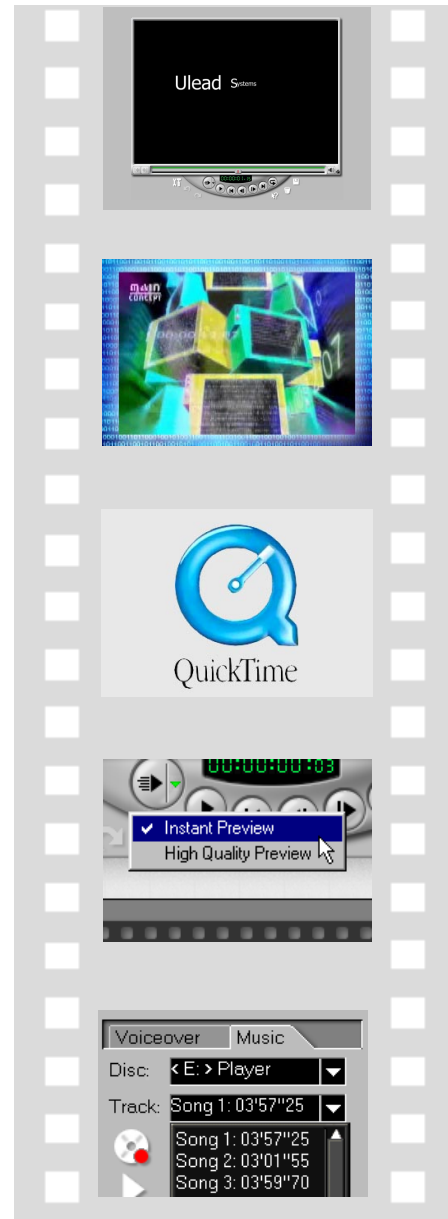
What's new?

Take advantage of VideoStudio's latest features and enhancements:

- Advanced interface design** - Enjoy working with a responsive task-based interface. The Preview Window can even be enlarged to let you analyze color, texture, or motion in greater detail while making full use of display space even at a resolution of 1024 x 768 or higher.
- MPEG capture from IEEE 1394** - Capture MPEG directly from your DV camcorder with the IEEE 1394 interface. Save a lot of hard disk space and skip the task of having to convert files to MPEG. A must for those who plan to output movies in VCD or DVD!
- Scene detection while capturing to multiple files** - Manage your files better! During capture, break your video into several files automatically based on changes in recording date and time. This applies to DV format video.
- SMPTE time code editing** - For editing jobs that require precise timing, such as animation, the SMPTE (*Society for Motion Picture and Television Engineers*) time code lets you work faster and more efficiently. By having a number assigned to each frame representing hours, minutes, and seconds, you get frame-accurate control of your editing task.
- Ulead COOL 3D animations** - Generate animated graphics with amazing special effects in Ulead COOL 3D and simply insert it in the Video or Overlay Track. Ulead's hottest 3D titling package, Ulead COOL 3D even allows you specify frame rate or size and codecs.



- **Enhanced title motions** - A wide range of motion style presets in the Animation Library folder allows you to produce an impressive choreography of eye-catching titles to match the look and feel of your video.
- **Video and image overlays** - Put together dynamic compositions of overlapping videos and images. Transparency controls remove the usual bounding box so you can create animated logos, cartoon clips over live footage, and a lot of other interesting effects.
- **QuickTime streaming** - Stream your video over the Web in QuickTime for full-frame (640 x 480), full-motion (30 fps) quality. QuickTime is a cross-platform standard that supports many file formats and codecs.
- **Instant preview** - Preview your video without having to create a temporary file. Select Instant preview to save hard disk space and rendering time.
- **Multiple CD-ROM support** - Hook up several CD-ROM drives to your PC and music tracks can be acquired from any selected drive.



System requirements

Video demands a lot from your computer. When setting up your system for video editing, the basic factors to consider are the size and speed of your hard drive, RAM, and processor. These determine how much video you can store and how quickly you can process or render your files. If you can afford a bigger hard drive, higher RAM, and faster chip, go with it. Just remember that technology is changing so rapidly and by evaluating first the kind of video editing projects you plan to do, you can better determine the setup that works best for you.

Following are the system requirements for setting up VideoStudio:

- Microsoft Windows 98, Windows 98 SE, Windows Me, Windows 2000, Windows XP
- 450 MHz above CPU speed is recommended
- 64 MB of RAM (128 MB or above for editing)
- 500 MB of available hard disk space or above; 4 GB is recommended (best results can be achieved with a 30 GB Ultra-DMA/66 72000 rpm. hard disk)
- Video for Windows and DirectShow compatible video capture card
- Windows compatible sound card
- CD-ROM or DVD-ROM drive

Tip: Follow the installation instructions of your hardware components carefully, particularly your capture card and consult the operating manual of your camcorder or capture device.

Hardware checkup before using VideoStudio

To ensure that your video production runs smoothly and trouble-free, click **Control Panel: Systems - Device Manager** and check if your devices are working properly in accordance with your Operating System (O/S).

DV IEEE 1394 capture card

The following Windows operating systems support the IEEE 1394 capture card. Always remember to turn on your DV camcorder or VCR connected to the IEEE 1394 interface so that it can be detected as image device or sound, video and game controller.

Windows 98

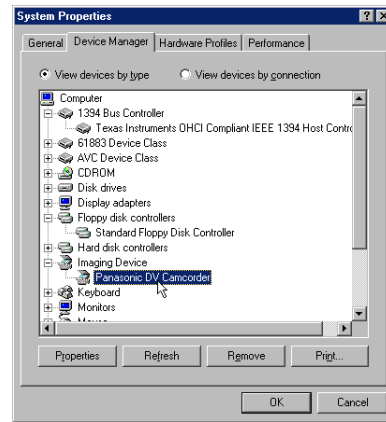
Windows 98 supports the Texas Instruments DV driver only but does not provide it. Search the drivers (if bundled) that come with the IEEE 1394 card. Check that the following devices are working properly:

- 1394 Bus Controller
- Sound, video and game controllers: 1394 camcorder

Windows 98 Second Edition / Windows 2000

Windows 98 Second Edition and Windows 2000 include the Microsoft DV driver and still support the Texas Instruments DV driver. Check that the following devices are working properly:

- 1394 Bus Controller
- Image Device: Microsoft DV Camera and VCR (For Microsoft DV driver only.)
- Sound, video and game controllers: 1394 camcorder (For Texas Instruments DV driver only.)



A device list on the Device Manager in the Systems Properties dialog box, Windows Me.

Windows Millennium Edition (Me)

Windows Me fully supports the IEEE 1394 card. Check that the following devices are working properly:

- 1394 Bus Controller
- 61883 Device Class
- AVC Device Class
- (Brand name) DV Camcorder: The brand name depends on the DV camcorder connected to the IEEE interface card.

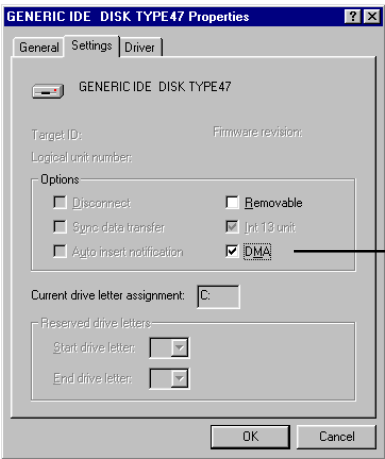
Windows XP

Windows XP fully supports IEEE 1394 and is also the only PC O/S that offers wireless access to cameras and other devices over a network. On a wireless IEEE 802.11 home network, attach an IEEE 1394-enabled laptop to a Windows XP-based PC and instantly access all other connected devices.

To run VideoStudio under Windows XP, check that the following devices are working properly:

- 1394 Bus Controller
- 61883 Device Class
- AVC Device Class
- (Brand name) DV Camcorder: The brand name depends on the DV camcorder connected to the IEEE interface card.

For Windows 98 and Windows Me, select the DMA option in **Device Manager: Disk drive Settings Tab**. In Windows 2000, the DMA option is hidden but it is always enabled. DMA avoids possible drop frame problems later when you are capturing video.



Settings Tab after clicking Properties when a hard drive is selected from Control Panel: System - Device Manager



Note: In addition to commonly used Texas Instruments and Microsoft DV drivers, there are other drivers available. Consult your camcorder's manual for suitable drivers.

Analog capture card

Windows 98, 2000, Me, and XP supports analog capture cards. Remember to turn on the camcorder or VCR and connect it to your computer. Then check that the following devices are working properly:

- Sound, video and game controllers

USB port

The Universal Serial Bus (USB) connector lets you attach a wide array of devices to your computer quickly and easily. These devices include digital cameras, Webcams, and just about every computer peripheral. Since Windows 98, 2000, Me, and XP fully support USB, installing the driver for this device is quick and easy too. Check that the following device is working properly:

- Universal serial bus controller

Installing and running VideoStudio

To install VideoStudio:

1. Place the VideoStudio CD into your CD-ROM drive.
2. When the Setup screen appears, follow the instructions to install VideoStudio onto your computer.

Note: If the Setup screen does not appear after loading the CD, then you can manually start it by double-clicking the My Computer icon on your desktop, then double-clicking the icon for the CD-ROM drive. When the CD-ROM window opens, double-click the Setup icon.



VideoStudio installation screen

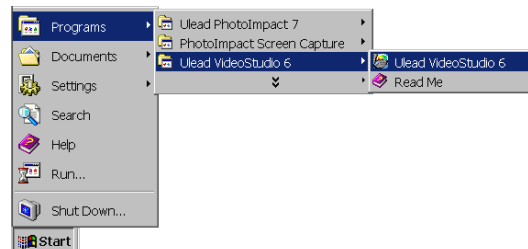
Please install also the following applications, because they are very important in making digital video work well on your computer. The installation program will walk you through installing:

- QuickTime
- Windows Media Format
- RealPlayer
- Acrobat Reader

Note: Skip this step if you already have newer versions of the above supporting applications installed in your PC.

To run VideoStudio:

- Double-click the VideoStudio icon on your Windows desktop.
OR
- Select the VideoStudio icon from the VideoStudio program group on the Windows Start menu.



Running VideoStudio from Windows Start menu

Configuring VideoStudio

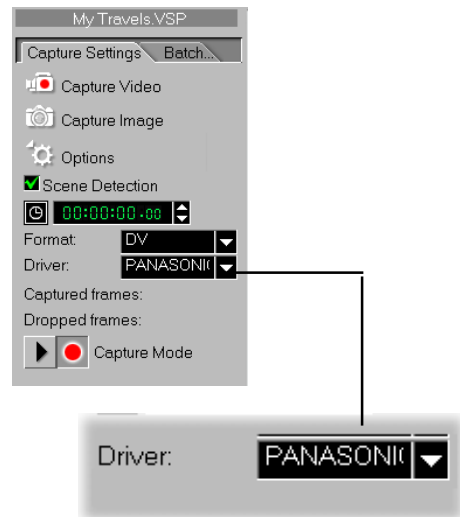
Camcorders, VCRs, and VCD/DVD players are common sources of video footage. To ensure a smooth interaction between these video sources and your computer, make sure that the settings of VideoStudio are configured properly depending on the capture device you are using.

DV (IEEE 1394 capture card)

To check the setup of VideoStudio for DV interface:

1. Connect your camcorder to your IEEE 1394 capture card.
2. Insert your video tape into the camcorder and switch it on. Make sure it is in playback mode (usually named **VTR** or **VCR**). Check your camcorder's manual for specific instructions.
3. Your **Capture plug-in** and **Device control** will be detected automatically based on your selected template.
4. Click **Capture Step** and check if your device is displayed in the **Options Panel** under **Driver**.

Note: When your camcorder is in Record mode (usually named **CAMERA** or **MOVIE**), you can still capture real-time video directly in VideoStudio, even if there's no video tape inserted.



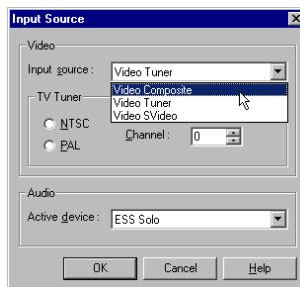
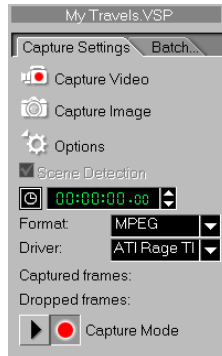
Check that your device is listed under Driver

Analog capture card

To check the setup of VideoStudio for analog interface:

1. Connect your camcorder, VCR, or other video source device to your analog capture card.
2. Insert your videotape into the capture device and switch it on. Make sure it is in the playback mode (usually named **VTR** or **VCR**). See your machine's manual for specific instructions.
3. Your **Capture plug-in** will be detected automatically.
4. Click **Capture Step** and check if your device is displayed in the **Options Panel** under **Driver**.

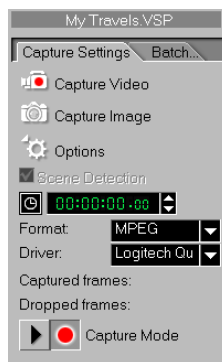
Note: If your capture device supports multiple video sources, the Input Source dialog box allows you to select your desired video source such as Composite, Tuner, or S-Video. Likewise, if you have multiple audio sources, this dialog box allows you to select your desired audio source.



USB input device

To check the setup of VideoStudio for USB interface:

1. Connect your video source device to your **USB** port using a standard USB cable and switch it on.
2. Your **Capture plug-in** will automatically be detected.
3. Click **Capture Step** and check if your device is displayed in the **Options Panel** under **Driver**.



Getting around VideoStudio

The VideoStudio interface has been designed to make the sometimes complicated task of editing movies on your PC intuitive and enjoyable. The illustration on this page shows an overview of the entire program, while the next few pages detail more specific features.

Track buttons

Each activates a track to edit. Click a button to change the Preview Window and available options accordingly.

Options Panel

Contains controls, buttons, and other information.

Preview Window

Shows the current clip, video filter, effect, or title.

Folder button

Click to switch between various library folders.

Load media button

Click to add video or audio files to the Library.

Library

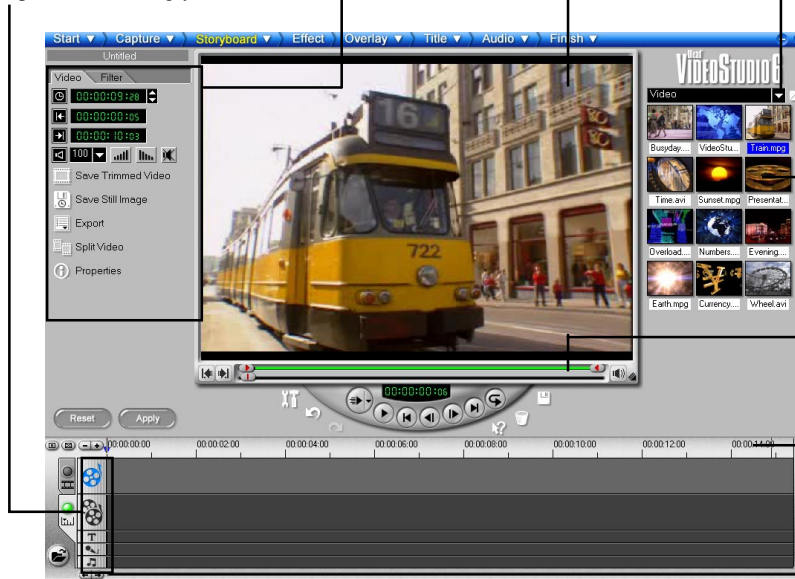
Stores and organizes all of your media clips.

Trim Bar

Used for trimming, editing, and cropping video clips.

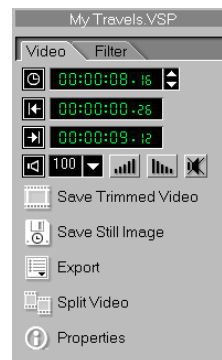
Timeline

Represents the period of time that a clip appears in your movie.



The Options Panel

The Options Panel changes depending on the program's mode and the step or track you are working on. The Options Panel may contain one or two tabs. Information in each tab vary depending on the selected clip.



Options Panel in Storyboard Step

Zoom controls

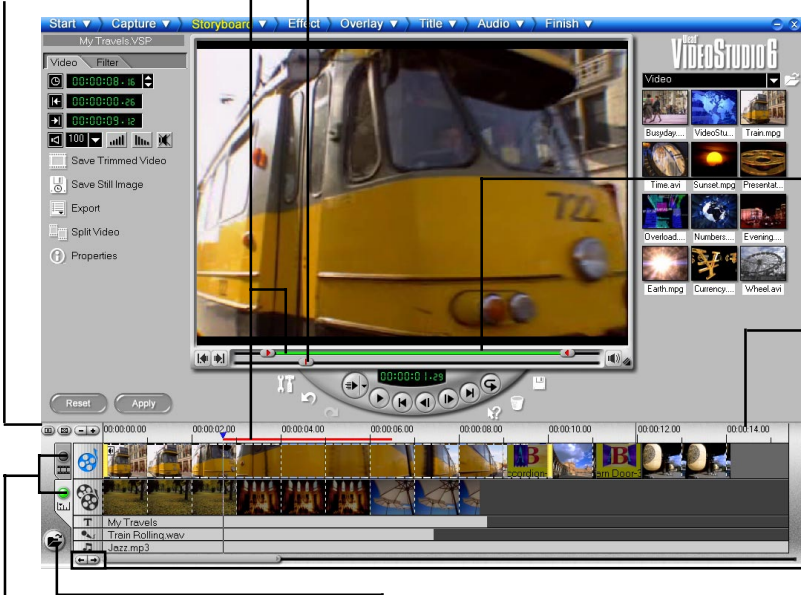
Increase or decrease the number of frames displayed in the Timeline.

Selected range

These color bars represent the trimmed or selected part of a clip or project.

Preview Bar

Click and drag these controls to scroll through a clip. The position is shown in the Preview Window's content.



Trim handle

Click and drag to trim a clip.

Time units

Represents the timing of clips in hours : minutes, seconds, and milliseconds

Storyboard and Timeline

Click tabs to switch between Storyboard Mode and Timeline Mode.

Insert media files

Displays a menu allowing you to place video, audio or image clips directly on the project.

Project scroll controls

Use the left and right buttons or grab the Scroll Bar to move around your project.

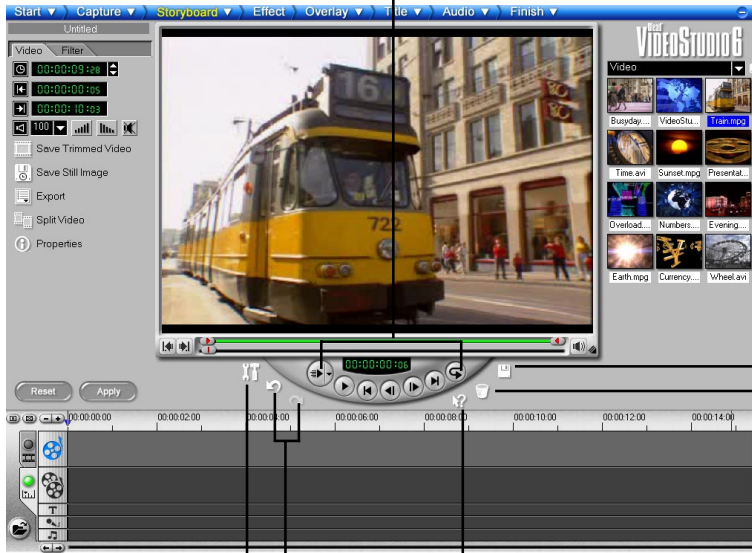


ToolTips

Place the mouse over a button or object to display a balloon which identifies the item.

Navigator buttons

These can be used to move around a project or a selected clip. See *page 22*.

**Save Project**

Displays the Save As dialog box to save the VSP file in a folder of your choice.

Trash Can

Drag and drop clips here to delete them from the project. You can also select a clip and press the Delete key on your keyboard.

Context Sensitive Help

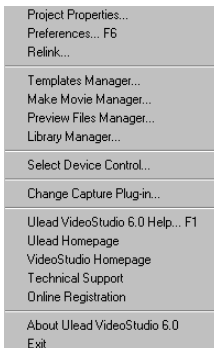
This button activates the Context sensitive help feature. After you click on it, your cursor changes to a question mark. Move over an object in the program and click again.

Undo and Redo

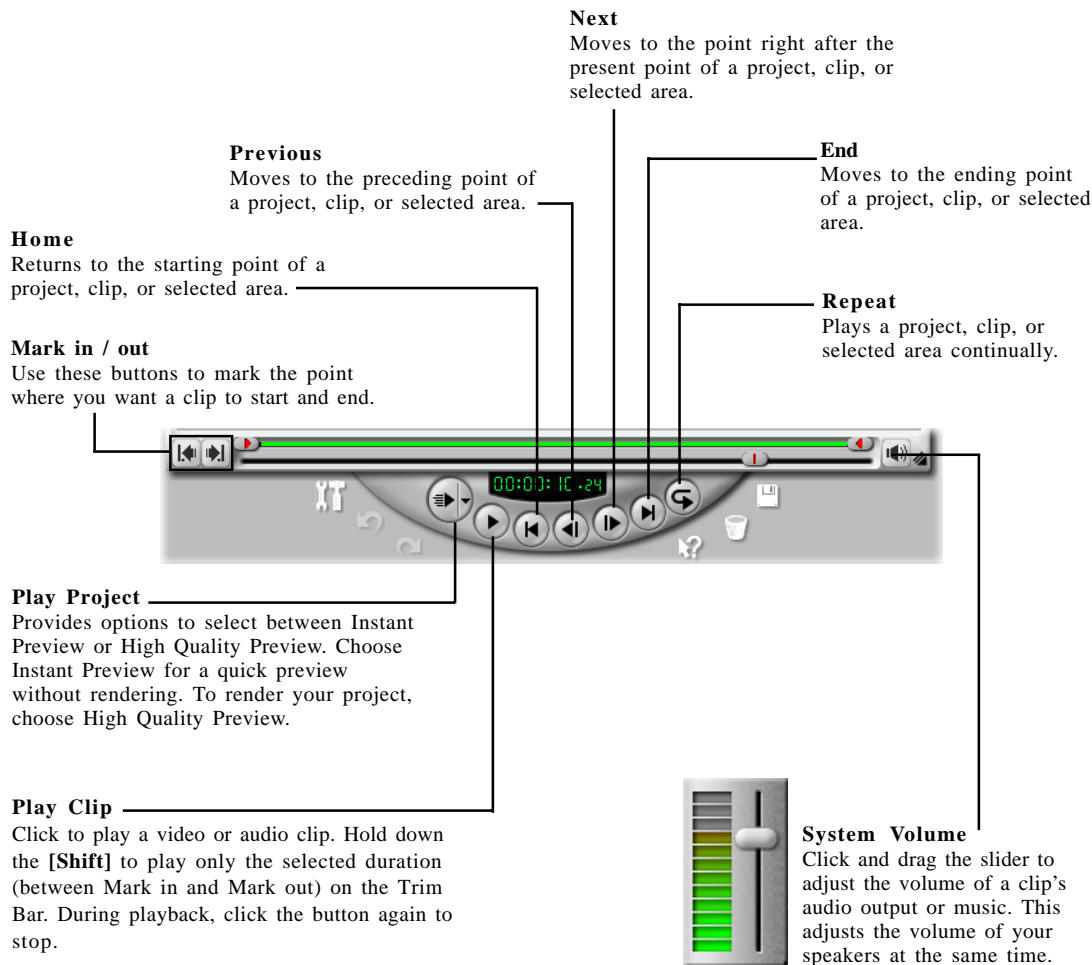
Any changes you make that you don't like can be instantly fixed or undone by clicking the left button. And if you change your mind, simply click Redo.

Settings and Commands

This button pops up a menu that contains many useful tools such as online Help and Preferences. You can also setup Device control and Capture plug-in from here.



Settings and Commands pop-up menu



The Library

The **Library** is a storage depot for everything you need to create a movie: video clips, video filters, audio clips, still images, transition effects, music files, titles and color clips. These are collectively known as media clips.

To add media clips to the Library:

1. Click **Load media** to open a dialog box for locating the media clip to insert in the Library.
2. Select the desired file.
3. Click **Open** when you are finished.

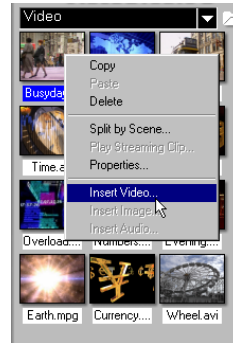
Note: You can also drag and drop files from Windows Explorer straight to the Library.



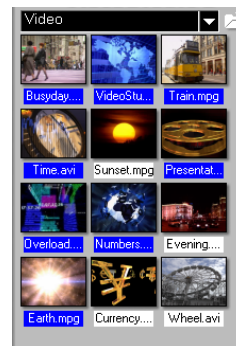
Load media allows you to locate the clip you want to add to the Library.

The type of clip you can insert depends on which step you are working on (such as Title or Audio). Use your mouse to drag and drop single or multiple clips from the Library to its destination.

In the Storyboard Step, you can drag and drop clips simultaneously from the Library to the Timeline whether you are in Timeline Mode or Storyboard Mode.



Right-click a clip in the Library to view the clip's properties as well as copy, delete, or split by scene.

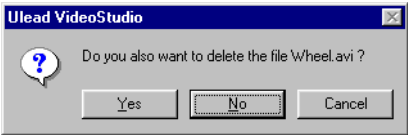


Hold [Ctrl] or [Shift] to select multiple clips.

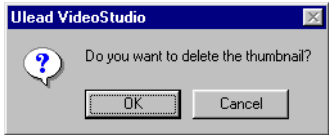
To delete media clips from the Library:

1. Select the clip to remove from the **Library**.
2. Drag the selected clip to the **Trash Can** or press **[Delete]**. You can also right click the clip in the Library and select **Delete**.
3. When prompted, verify whether you also want to delete the source file from your hard disk.

Note: Deleting source files from your hard disk permanently removes them from your computer. You may not be able to recover them.



Deleting source file dialog box
(Source file will be deleted.)



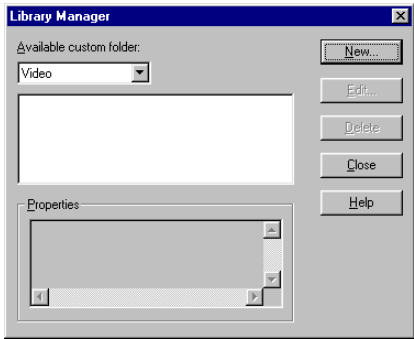
Deleting thumbnail dialog box
(Source file will not be deleted.)

Library Manager

The **Library Manager** organizes your custom Library folders. These folders help you store and manage all kinds of media files.

To use the Library Manager:

1. Click **Settings and Commands** then select **Library Manager**. You can also click the Folder arrow.
2. Select a media type from the **Available custom folder** list.
3. Click **New** to display the **New custom folder** dialog box and create a new folder. Enter a name under **Folder name** and a description under **Properties**. Click **OK**.
Click **Edit** to rename or modify the description of a selected custom folder.
Click **Delete** to remove a selected custom folder from the **Library**.
4. Click **Close**.



Library Manager dialog box

Steps to create your movie

VideoStudio is laid out in a step-by-step format, following the items on the Menu Bar at the top of the program, from left to right. Click a step on the Menu Bar to move directly to it. The step you are currently in is highlighted in yellow.

It is not necessary to work through every step every time, but these steps can serve as a guide to creating a complete movie. These steps do not necessarily need to be followed in the order that they are presented.

Your work is saved in a small project file (*.VSP) that organizes all of your media files together. A project file is NOT the same as a movie and changes made to it do not affect your media clips. It is possible to have a number of different projects using the same clips.

Start ▼

The Start Step is for creating a new project file or opening an existing one. This is the very first and required step whenever you want to work in VideoStudio. See *page 27*.

Capture ▼

Once a project is opened in VideoStudio, video can be recorded directly to your computer's hard disk in the Capture Step. Footage from a videotape can be captured as a single file or automatically divided into multiple files. This step allows you to record video files and still images. See *page 31*.

Storyboard ▼

The Storyboard Step and the Timeline are the heart of VideoStudio. This is where you arrange, edit, and trim your video clips. Video filters can also be applied to your video clips in this step. See *page 38*.

Effect

Transition effects between scenes are fun and easy. Thumbnail animations and drag-and-drop operations put dozens of cool effects at your fingertips. See *page 49*.

Overlay ▼

This feature allows you to superimpose one clip over another as an added effect to your movie. On top of what you can do using Effects, you can use Overlay feature to add a professional touch to your work. See *page 51*.

Title ▼

No movie would be complete without opening and closing titles. You can design and animate your text title in any Windows True Type font, color and size, or choose from various presets in the Library. See *page 53*.

Audio ▼

Background music sets the mood of your movie. VideoStudio lets you select and record music files from one or several CD-ROM drives attached to your computer. You can also dub over your video in this step. See *page 58*.

Finish ▼

The final cuts have been made and the music has been synchronized with care. Now it's time to put it all together and make a master copy of your newest movie. See *page 64*.

Notes:

- When moving between steps, VideoStudio Guide - a real-time online Help - is displayed to give you quick reference and tips. You can enable or disable it in the **Preferences** dialog box which you can access by clicking **Settings and Commands: Preferences** or by pressing [F6].
- Since video rendering usually requires large hard disk space, use the Preview Tab in the Preferences dialog box to assign proper space and folders in your hard disk(s). This should be done before opening a project in VideoStudio to ensure enough there is space for rendering and previewing.

Start

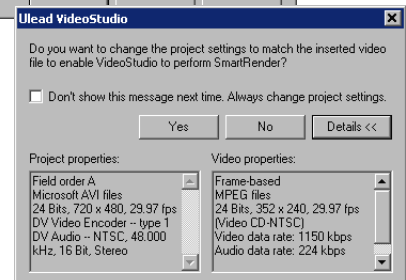
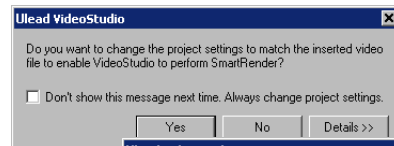
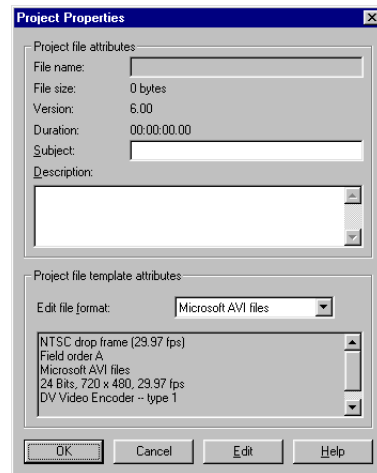
The Start Step is where you create a new **project file** (*.VSP), or open an existing project. A project file is a small file used by VideoStudio to store all of the information about your movie such as clips used, trimming information, duration of movie, size of frames, and type of movie to make. A project file is not the finished movie and can only be opened in VideoStudio. The actual process of creating a movie from a project file is performed in the Finish Step.

Creating a new project

When you run VideoStudio, it automatically opens a new project and lets you start composing your video production. If this is your first time to use VideoStudio, the new project uses VideoStudio's initial default settings. Otherwise, the new project reuses the project settings which you have last used. To check what these settings are, click **Settings and Commands** and select **Project Properties**.

Project settings determine how your video project is rendered when you preview the project. **Rendering** is the process by which VideoStudio converts raw video, titles, sounds, and effects into a continuous stream of data which can be played back in your computer. You can modify the project settings in the Project Properties dialog box.

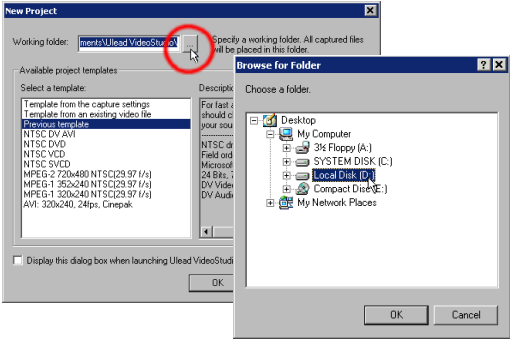
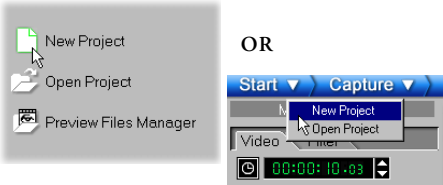
When you capture or insert your first video clip into the project, VideoStudio automatically checks the properties of the clip and your project. If properties such as file format, frame size, etc. are not identical, VideoStudio displays a message and gives you the option to have the project settings automatically adjusted to match the clip's properties. Changing the project settings allows VideoStudio to perform the **SmartRender** function. See page 41 for more information on SmartRender.



You can also begin by creating an empty project file using **New Project**.

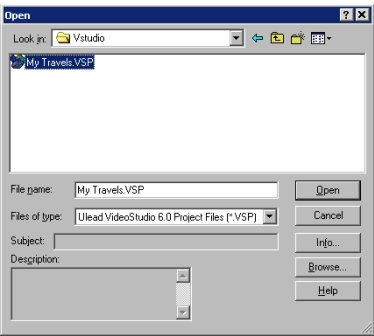
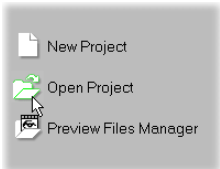
To create a new project using New Project:

1. Click **New Project** in the Options Panel or the **Start** menu arrow and select **New Project**.
2. Click **Browse** to select a working folder where all your captured/project files will be located. You can also click **Settings and Commands: Preferences**. Enter a folder name to create a subfolder in this location.
3. Choose a template from **Available project templates** which includes all templates you created previously. See page 29. Select the one that most closely matches the type of movie you want to create.
4. Click **OK**.



To open an existing project:

1. Click **Open Project** or the **Start** menu arrow and select **Open Project**.
2. Select the project file (*.VSP) you want to open. If you are not sure where the file is, use **Browse** and then click **Scan**. This finds all *.VSP files under your assigned folder or drive.
3. Click **Open**.



Note: A faster way to open an existing project is to click it in the **Recent file list**. VideoStudio, however, cannot open a project that has been moved or removed.

Selecting a template

Templates provide settings that can get you started as quickly as possible. When choosing a template, first know the attributes of the sources you are going to use in the project. Video sources can be already existing video files in your hard drive or still to be captured scenes from your capturing device. Remember that the template you're going to choose here does not restrict you from changing the output format of your final movie. Templates are more directly related to your video source.

To get the best quality and rendering time, choose a project template that has the same frame size, frame rate, and other attributes as your capture settings.

- **Template from the capture settings** uses the same frame size, frame rate, and other attributes as your capture device's settings.

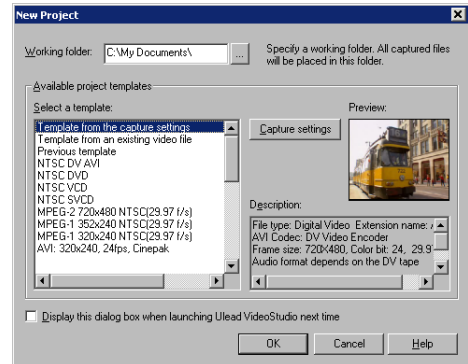
VideoStudio allows you to reuse the settings of previously created video files. This makes it easier to create several projects with exactly the same properties.

- **Template from an existing video file** allows you to create a template based on the settings of previously created AVI and MPEG video files.
- **Previous template** reuses the settings of the last project template used.

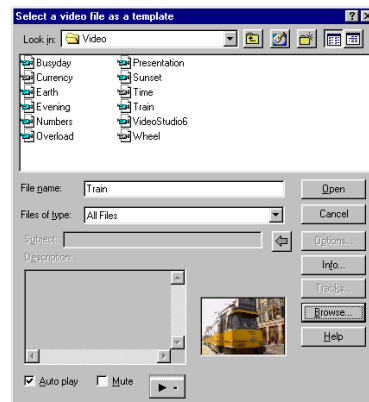
Video is displayed on **NTSC** or **PAL** devices, the most common of which is the television. Although many devices now work with both, it is helpful to select the standard that suits your specific need.

- **NTSC** is predominant in North America and many Asian countries.
- **PAL** is the standard in Europe and South Pacific.

If you select your country when installing VideoStudio, the appropriate TV standard is selected by default.



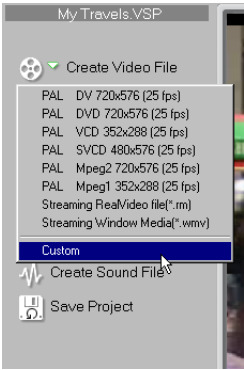
Select from Available project templates depending on the settings required by your project



Select a video file as a template dialog box is displayed upon selecting **Template from an existing video file**

The output video file format determines the media type by which your project can be distributed. See *page 69*.

- **MPEG-1** lets you output in VCD.
- **MPEG-2** lets you output in DVD.
- **DV** lets you record back to the DV camcorder.
- The widely-used **Microsoft AVI** is ideal for videos intended for viewing on most PCs.
- Streaming formats such as **MOV**, **RM**, and **WMV** are used in creating video for sharing over the Internet.

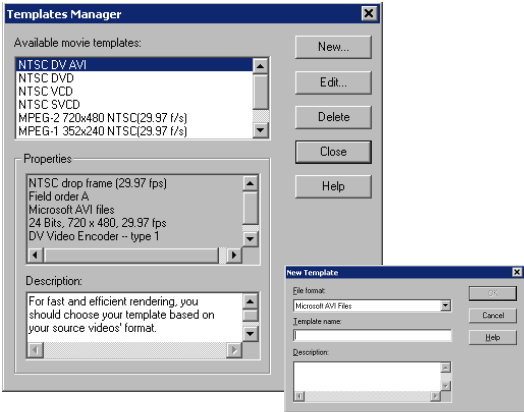
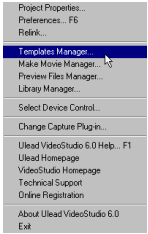


VideoStudio also allows you to create new templates with your custom settings. This means you can set precise values for frame rate, frame size, video data rate, audio bit rate, compression, and other attributes.

To create a new template:

1. Click **Settings and Commands: Templates Manager** to display the **Templates Manager** dialog box.
2. Then click **New** to display the **New Template** dialog box.
3. Select a file format and enter a template name and its description. This will be displayed automatically in the **New Project** dialog box.
4. Click **OK**.
5. The **Template options** dialog box is displayed. Specify the settings of your template.
6. Click **OK**.

Note: To modify clips in Templates Manager, select from Available movie templates and click **Edit**.



Capture

The process of transferring video from your camcorder or other video sources to your computer is called capturing. When everything is ready to go, the video feed from your source device should be visible in the Preview Window. If your card supports a television monitor, you should also be able to watch your video on it.

Checklist for successful video capture

Capturing video is one of the most demanding tasks you will ever ask of your computer. It involves high data rates and requires huge amounts of disk space. Here are a few things you can do to ensure success:

- Shut down ALL other programs that are running except Windows Explorer and VideoStudio. Remove the Screen Saver to avoid possible interruption.
- Best results can be achieved by using a dedicated video hard disk, preferably with the capabilities of at least Ultra-DMA/66, 7200 rpm and more than 30 GB space.
- For better manipulation of batch capture and camcorder device control, correct timecode on the DV tape is a must. To do this, before shooting your video, use the standard playback (SP) mode and shoot a blank video (for example, leaving the lens cover on while recording) without interruption from start to end of a tape.

Capture Video

Transfers video from your source to your hard disk.

Capture Image

Captures a single frame as a still image from your source to your hard disk.

Options

Displays a menu allowing you to modify your capture settings.

Format

Allows you to easily select a file format to use for saving captured videos.

Driver

Displays the detected capture device and lists other capture device drivers installed in your computer.

Scene Detection

Automatically separates captured video into several files based on changes in recording date and time.

Capture duration

Sets the length of time for the capture.

Captured frames

The total number of captured video frames.

Dropped frames

The total number of lost video frames while capturing.

Switch to capture mode

Click to work in Capture Mode and perform capturing tasks.

Switch to playback mode

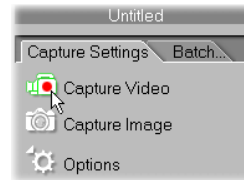
Click to work in Playback Mode for instant previews.



Capturing DV video

To capture DV video:

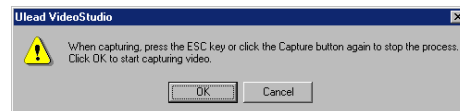
1. Connect your camcorder to the IEEE 1394 capture card. Turn it on and set it to **Play** (or **VTR / VCR**) mode. Check your device manual for specific instructions.
2. Open a new project.
3. In the **Capture Step**, click **Play** in **Navigator**.
4. When you get to the part of the video you want to record, click **Capture Video** on the **Capture Settings Tab** in the **Options Panel**.
5. Click **Capture Video** again or press **[Esc]** to stop capturing.



Capturing analog video

To capture video using an analog capture card with audio / video jacks or S-video:

1. Connect your video source device to your capture card. On some cards, you may also need to connect the audio cables.
2. Open a project and click the **Capture Step**.
3. Select a capture file format (**MPEG** or **AVI**) from the **Format** list.
4. Scan your video to search the part to capture.
5. When you get to the point you want to record, click **Capture Video** on the **Capture Settings Tab** in the **Options Panel**.
6. Click **Capture Video** again or press **[Esc]** to stop capturing.



If a confirmation dialog box appears, click **OK** to start the capture process. To disable this, click **Settings and Commands** and select **Preferences**. In the **Preferences** dialog box, click the **Capture Tab** and clear **Enable pressing OK to capture**.

Tips:

- Capture menu items are grayed out in the Playback Mode. If this happens in the Capture Mode, check if your video capture devices are correctly installed.
- A delay in capture may be due to the confirmation dialog box or connection between devices. It is better to rewind your tape to an earlier point before capturing and just trim the video later.
- The normal number of dropped frames is zero. If any frames are dropped, check if the DMA setting is enabled. See *page 14*.

Direct capturing MPEG video

Capturing video directly from your camcorder straight to MPEG format is one of the most exciting developments in computer video. Capture straight to MPEG-1 or MPEG-2, depending on your needs and skip the task of having to capture in other formats only to convert it later. And with the much smaller size of MPEG files, you save on hard disk space. Both the IEEE 1394 and analog capture cards support direct capturing of MPEG video.

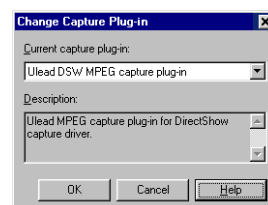
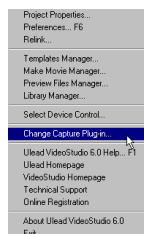
Note: This feature is only available if the analog capture card supports RGB 24 or YUV capture. (Please see the manual of your capture card.)

To capture video in MPEG format:

1. Connect your camcorder or VCR to your capture card. Switch it on and set it to **Play** (or VTR / VCR) mode. Check your device manual for specific instructions.
2. In the **Capture Step**, select **MPEG** from the **Format** list.
3. **Ulead DSW MPEG Capture Plug-in** will be detected automatically. Use this capture plug-in when capturing MPEG from a DV camcorder.

Otherwise, if you have a USB camera or analog capture device which does not support this capture plug-in, click **Settings and Commands** then select **Change Capture Plug-in** and choose **Ulead VFW Capture Plug-in**.

4. Click **Options** and select **MPEG Settings**. Choose the type of MPEG you would like to capture and set other attributes.
If you are capturing from a USB device or analog source, also select **Video format** from the **Options** menu to specify the desired frame size.
5. Click **Capture Video** to start capturing.
6. Click **Capture Video** again or press [Esc] to stop capturing.



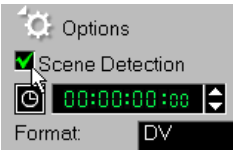
Scene Detection / Split by Scene

Scene Detection and **Split by Scene** divide DV into multiple files or clips based on recording date and time. This feature is useful when you have several video sessions recorded on the same DV tape at different times and you want to separate them into different clips or files. You can divide footage during capture or after being captured.

To use Scene Detection option in Capture Step:

- 1. Select **Scene Detection** on the **Capture Settings Tab** in the **Options Panel**.
- 2. Click **Capture Video**.

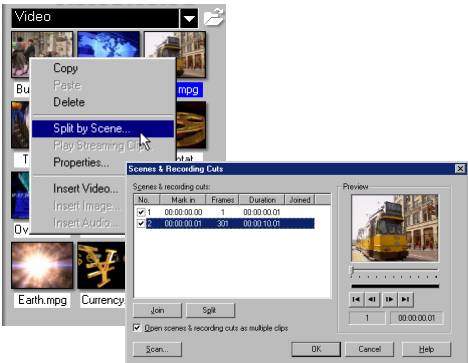
Note: This splits the footage into multiple files based on the date and time of recording. The captured files are inserted into the Video Track.



To use Split by Scene on captured DV AVI files:

- 1. Load the DV formatted AVI file into the **Library**.
- 2. Right-click its thumbnail, and select **Split by Scene**.
- 3. The **Scenes & Recording Cuts** dialog box is displayed. Click **Scan**.

Note: This splits the video file into multiple clips based on recording date and time. Physically, there is still one file.

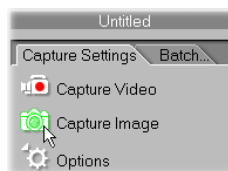


Capturing still images

In addition to video, VideoStudio also allows you to capture still images. The image format can be BMP or JPEG, and the size depends on its source video. To choose your image format, click **Settings and Commands: Preferences**. In the **Preferences dialog box** click the **Capture Tab** and set the format.

To capture still images:

1. Connect your camcorder or VCR to your capture card. Switch it on and set it to **Play** (or VTR / VCR) mode. Check your device manual for specific instructions.
2. Open a new project.
3. In the **Capture Step**, click **Play** in **Navigator**.
4. When you get to the part of the video you want to record, click **Capture Image** on the **Capture Settings Tab** in the **Options Panel**.



Captured video file size in Windows

VideoStudio runs on Windows operating systems and is subject to limitations in file size when capturing or rendering video. VideoStudio automatically performs **seamless capture**, saving video into a new file every time the maximum allowable file size for a single video file has been reached.

Seamless capture will be performed only when capturing DV from a DV camcorder through the IEEE 1394 capture card. The maximum captured file size per video file is 4 GB in Windows operating systems (such as Windows 98 and Me) that use the FAT 32 partition file system. Captured video data in excess of 4 GB are automatically saved to a new file. In Windows 2000, which uses the NTFS file system, there is no limit in the captured file size.

Seamless capture is not available in VFW (Video For Windows) capture.

Note: VideoStudio automatically detects your file system and performs seamless capture only in a FAT 32 partition file system. The NTFS system does not have the 4GB limitation.

Batch Capture

Overburdened by immense amounts of footage to capture from your DV tape? You can get peace of mind through VideoStudio's **Batch Capture**. This feature captures only the video clips you want with just one click and saves you a considerable amount of time.

To Batch capture, simply watch the video. At any time, press **[F3]** to mark in the task and **[F4]** to mark out. Press **[F3]** and **[F4]** as often as required.

Note: Batch capturing can be achieved only when you are using a DV tape and the IEEE 1394 card for computer connection.

Capture Video

Captures the listed tasks all at once.

Play Selected Tasks

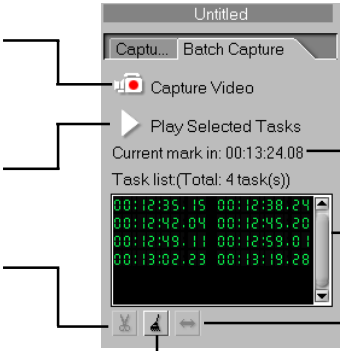
Allows you to preview selected tasks before capturing.

Delete the selected task(s)

Removes the selected task(s).

Deletes all tasks

Removes all tasks on the list.



Current mark in

Displays the current starting timecode.

Tasks list

Displays all the tasks created in the timecode format. Click to select a task. Multiple selections can be made by holding down **[Ctrl]** or **[Shift]**.

Modify a task

Changes the timecode of either the starting or the ending point.

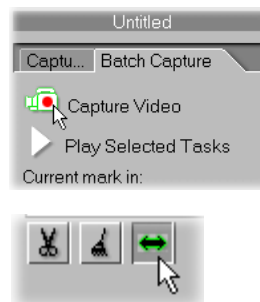
To use Batch Capture:

1. Switch on your camcorder and set it to **Play** (or VTR / VCR) mode. Refer to your camcorder's manual for specific instructions.
2. Open a project.
3. In the **Capture Step**, click the **Batch Capture Tab** in the **Options Panel**. You can also click the **Capture** menu arrow and select **Batch Capture**.

Note: The videotape automatically plays once you click the **Batch Capture Tab**. Rewind or forward you videotape first to cue it.

4. When you get to the part of the video you want to record, press **[F3]**. Then press **[F4]** to mark out the task.
5. Continue to play the video, and then repeat step 4 as needed.
6. Click **Play Selected Tasks** to view the selected segments on tape. Click **Modify a task** to change a marked segment. You can also double-click a task and enter a new timecode.
7. Click **Capture Video**.
8. Batch capture starts based on all or selected (if any) tasks. The process stops when the last task is captured. A report is displayed for your reference.

Note: It is up to you whether to click **Stop** before starting Batch capture. However, if you need to modify some tasks, click **Stop** first to help VideoStudio prioritize capturing tasks.



Storyboard

A **storyboard** is an outline for a movie. It contains a chronological order of the events that occur in your story. The bottom half of the VideoStudio interface is simply an electronic storyboard. You can edit your project either in the **Storyboard Mode** or **Timeline Mode**.



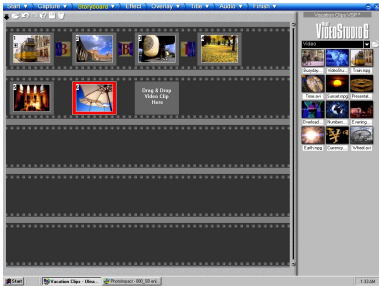
Storyboard Mode

Storyboard Mode is the fastest and simplest way to add clips to your movie. Clips can be moved around by simply dragging them. You may find that starting out in the Storyboard Mode is the easiest way to get your project rolling. Each picture represents an event in your movie, an event being a video clip or a transition. Thumbnails show at a glance the chronological order of events in your project.

You can drag and drop clips to insert and arrange them. Transition effects can be inserted between clips. Selected clips can be trimmed in the Preview Window. See *page 43* for more information on trimming.

Larger storyboard display

The storyboard display can be maximized to enjoy a bigger workspace. Click **Enlarge** to divide the entire display area between the storyboard display and the Library. With a larger workspace, you can arrange clips and apply effects and transitions more easily.



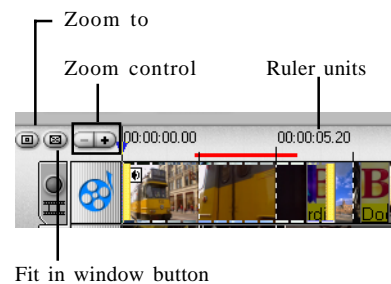
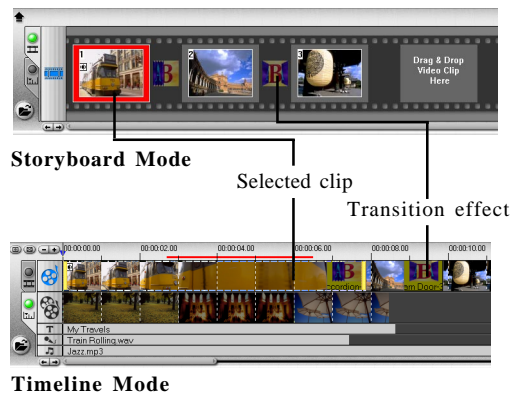
Click **Minimize** to switch back to the normal Storyboard Mode display.

Timeline Mode

The **Timeline Mode** allows you to fine tune effects and perform frame accurate trimming and editing. The Timeline Mode shows exactly when and where events in your story occur based on the position of clips in each track. Clips are simply dragged from the **Library** to the **Timeline**. They are displayed here as short sequences.

The length of a clip accurately represents its duration in your project. The ruler units, represented by timecodes, can be adjusted to give you precise control over trimming and editing. Use the **Zoom** controls or click the **Ruler menu** to adjust the ruler units.

Click **Fit in window** to see the entire project displayed on one screen. If you have a mouse with a scroll button, the scroll button can be used to scroll through the timeline.

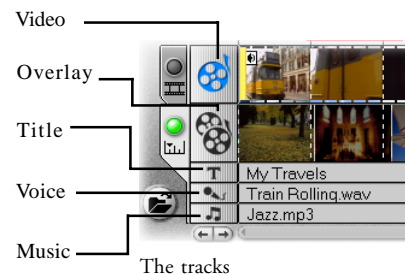


Tracks

The Timeline is divided horizontally into the Video, Overlay, Title, Voice, and Music Tracks.

To switch to different tracks:

- Click the Step menu item that corresponds to the track.
- Click the track's icon.
- Double-click the track or the clip.



The Options Panel

In the Storyboard Step, the Options Panel contains the Video and Filter Tabs. The Video Tab shown below is displayed when a video clip is selected. Here, you can monitor the length of your clip, control its volume, save a trimmed clip as a new file, or save a selected frame as an image file. In the Video Tab, you can also export video clips in various media. When you click the Filter Tab, the Options Panel displays the list of video filters which have been applied to a selected video clip and allows you to modify filter settings.

Video mark in / out

Displays the starting / ending point of a video clip (after trimming).

Volume

Click the arrow or enter a value directly to adjust volume.

Save Trimmed Video

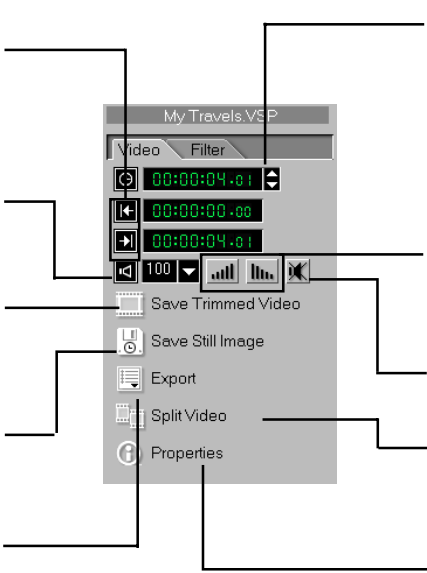
Applies any trimming modifications to a clip and saves it to a new video file.

Save Still Image

Saves the currently selected frame to an image file in the Library.

Export

Displays a drop-down menu that allows you to output your clip to Ulead DVD Wizard or as a Web page, E-mail attachment, DV recording or Greeting Card.



Video duration

Displays the length of time of the clip. Click a value or an arrow button for modification.

Fade in / out

Gradually increases / decreases the volume of the clip for a smooth transition. Click Settings and Commands: Preferences to set the fade in / fade out duration.

Mute

Disables audio of the selected clip.

Split Video

Breaks a selected video clip in two.

Properties

Click to display specific information about a clip.

SmartRender and Play Project button

SmartRender technology allows “changes-only” rendering which eliminates the need to re-render entire video sequences when only slight changes have been made. This is especially useful for rendering across transitions, title sequences, or to check the timing of audio clips in relation to the associated video. It is advisable that projects are rendered regularly to reduce overall render times.

While editing, you will want to preview your work frequently to see how your project is progressing. **Play Project** allows you to select between **Instant Preview** and **High Quality Preview**. The first allows you to preview changes in your project without the need to create a temporary preview file. The latter renders a preview file and provides a quick preview right after.

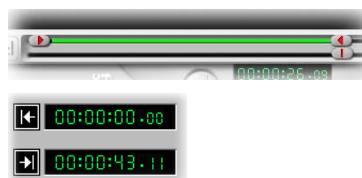
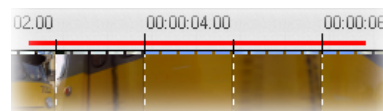
For faster previews, you may choose to play only a part of your project. The selected range of frames to preview is referred to as the **preview area**, and it is marked as a red bar in the Ruler Panel.

To play the preview area only:

1. Use the **Trim Bar** or the **Mark in/out** buttons to select the preview area.
The **Preview range mark in** and **Preview range mark out** timecodes will then be displayed in the Options Panel.
2. To preview the selected range of frames, hold **[Shift]** and select a preview option (**Instant Preview** or **High Quality Preview**).
Or, when the desired preview option is already selected, hold **[Shift]** and click **Play Project**.



Play Project in Navigator

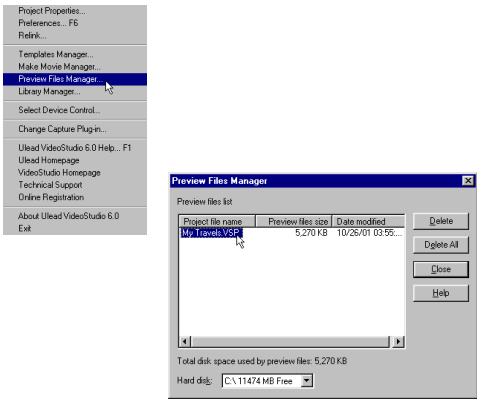


Preview Files Manager

Use **Preview Files Manager** to free hard disk space occupied by temporary preview files used in your project.

To delete temporary preview files:

1. Click **Settings and Commands: Preview Files Manager** to display the **Preview Files Manager** dialog box. You can also click **Preview Files Manager** in the **Start Step Options Panel**.
2. Select the VSP project under **Project file name** where the temporary preview files you want to remove are located and click **Delete**. This removes only the temporary preview files and not the actual VSP project.
3. Click **Delete All** to remove all temporary preview files of all VSP projects.
4. Click **Close**.



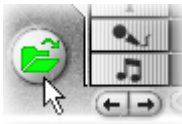
Tip: Press [Ctrl + S] to quickly save your project from time to time. This ensures that all project settings and file links are always updated.

Inserting a clip into the Timeline

To add video clips to the Timeline, you can use drag and drop or browse and select, depending on where your clips are located.

To insert a video clip into the Timeline:

- Select a clip in the Library and drag and drop it to the Timeline. Multiple clips can be selected by pressing [Shift] or [Ctrl].
- To insert a clip from a file folder directly to the Timeline, click **Insert Media Files**, located to the left of the Timeline.



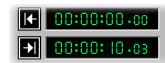
Insert Media Files

Trimming a clip

The best part of editing your movie on your computer is the ease with which you can snip and trim with frame by frame accuracy.

To trim a clip from the Timeline:

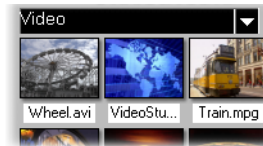
1. Click a clip in the **Timeline** to select it.
2. Drag the yellow **Trim handles** on either side of the clip to change its length. The Preview Window reflects the position of the Trim handle in the clip.
3. To trim frame by frame, refer to the **Video mark in / out** timecodes in the **Options Panel**. These represent precise positions of frames in the Timeline.
4. Other clips in your project automatically reposition themselves according to changes made.



It is most convenient to use the **Trim Bar** in adjusting your clips. This is the green bar beneath the Preview Window which represents the selected portion of a clip. If the clip has not been trimmed, the green bar extends along the entire length.

To trim a clip with the Trim Bar:

1. Select a clip from the Timeline or the Library.
2. Click and drag a **Trim handle** to set the trim position.
3. When you have selected the area you want to trim, click **Apply**.
4. Hold down **[Shift]** and click **Play Clip** to selectively play only the trimmed portion of the clip.



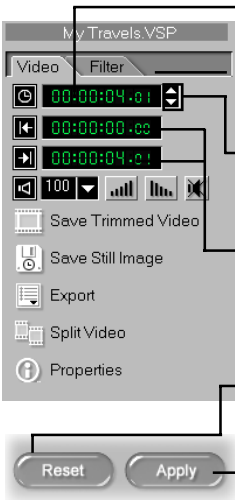
For precise control, click on a Trim handle, hold it, and use the left or right arrow keys on your keyboard to trim one frame at a time. Check the Video mark in / out timecodes in the Options Panel to monitor your trimming. The Mark in / out points can also be set by pressing **[F3]** and **[F4]**, respectively.

You can also use **Zoom** controls to display each frame of your video in the Timeline and trim one frame at a time. The **Scroll Bar** makes navigating through your project quicker and easier. A wheel mouse can also be used to scroll, and to zoom by pressing **[Ctrl]**.

To trim a clip in the Options Panel:

1. Select a clip from the Timeline or the Library.
2. Click the time in **Video duration** and the numbers will blink.
3. Enter a length of time for the clip. **Mark in** shows the timecode representing the first frame of the clip and **Mark out** shows the timecode for the last frame.
4. Click **Apply**.

Note: Changes made in the Video duration box only affect the Mark out point. The Mark in point remains unchanged.



Video duration
Displays and sets the length of time of the clip.

Arrow buttons
Use these to fine tune your trimming.

Video mark in / out
Displays the points in the original clip where the trimming takes place.

Reset sets all values back to defaults.

Apply renders the new settings made in the Options Panel to the selected clip.

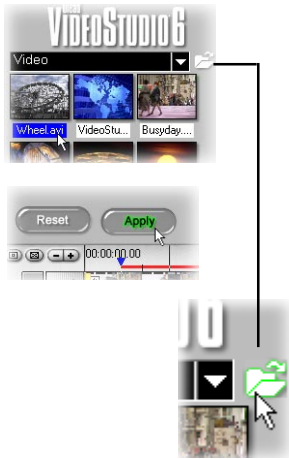
Working with clips

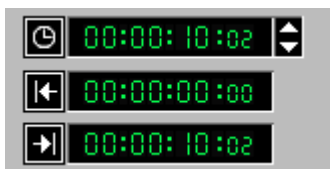
Your original video file can be used as a source for creating a number of different clips in the Library. This type of editing allows you to trim different segments of a video file without affecting its source file.

To create multiple copies of a single clip:

1. Select a clip from the Library.
2. Click and drag a Trim handle to set the trim position.
3. Click **Apply**.
4. Click **Load video** to reinsert the original video file into the Library. Therefore, there are now two copies of a single clip in the Library. Repeat steps 1 to 4 to add more copies as needed.

Note: In step 1, if you want to use an existing clip in the current project, drag a clip from the Timeline into the Library first.

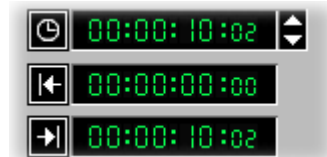




This clip is the trimmed version of the original video file. You can see that a selected clip was trimmed by checking the Options Panel or the Trim Bar. Once a clip is trimmed, rename the thumbnail in the Library to distinguish it from the original. (See detail on renaming in the notes below.)



This Library contains five copies of the same clip. Selected clips are highlighted in blue.



Then the original clip is reinserted into the Library, the Mark in point is zero and the Mark out point is the last frame. The duration is the entire clip. The Trim Bar clearly shows that the clip has not been trimmed.

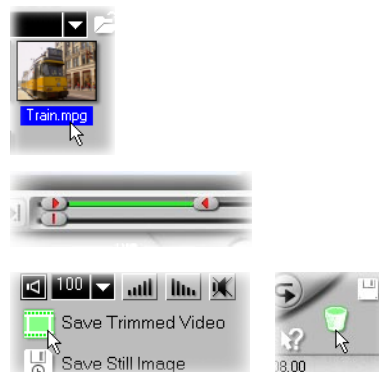
Frequently, when you make changes, you may wish to make a permanent change to the clip and save the edited file. Again, VideoStudio gives you a margin of safety in that it saves the trimmed video to a new file and does not alter the original file. You can press **[Delete]** or drag the thumbnail to remove it from the Library, or even remove the original file to recover disk space.

To break a clip into multiple files:

1. Select a clip from the Library or Timeline.
2. Click and drag a **Trim handle** to set the trim position.
3. Click **Save Trimmed Video**.
4. You now have two different physical video files on your hard disk, the original file and a trimmed copy.

Notes:

- To rename a thumbnail, click the name of the thumbnail to modify.
- Dragging a clip from the Timeline to the Trash only removes the thumbnail. The original video file is not affected.



Capturing still images in the Storyboard Step

A still image can be captured in the **Storyboard Step** by selecting a specific frame in the Timeline and saving it as an image file. In this manner, possible distortions are avoided since the image is not acquired from a running video, unlike in the Capture Step.

To capture still images:

1. Select a clip in your project.
2. Drag the **Preview Bar** to the frame you want to capture.
3. Switch to an image folder in the Library. The folder can be the default Image folder, or the one created by yourself.
4. Click **Save Still Image** in the **Options Panel**.
The new image file is saved to the hard disk and is represented as a thumbnail in the image folder you assigned.



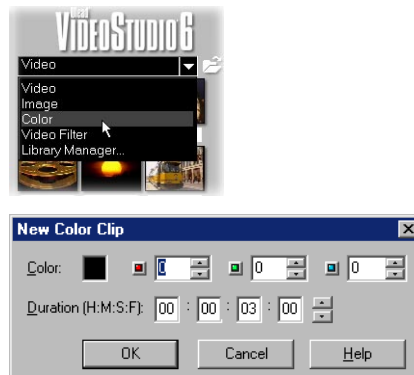
Using color clips

Color clips are simply solid colored backgrounds that are useful for titles and transitions. For example, black clips can be used for an effective fade to black transition. Place your opening credits over the top of the color clip and then use a cross fade effect to create smooth transition into your movie. See *page 49*.

You can insert a new color to the Color Library and control its duration just like an image clip. Once a color clip has been inserted into the Library, you can drag it to the Timeline to put it into your movie project.

To insert a color clip in the Color Library:

1. Select **Color** from the folder list or click the Storyboard menu arrow and select **Color**.
2. Click **Load color** to display the New Color Clip dialog box.
3. Here, click the color box to select a color either from the Ulead Color Picker or the Windows Color Picker.
4. Adjust the **RGB** values if needed.
5. Set **Duration**.
6. Click **OK**.





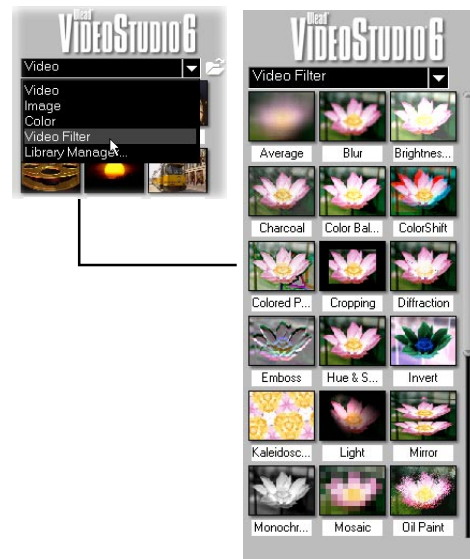
Titles set against solid backgrounds are often easier to see than against an image, especially a moving one

Using video filters

Video filters are effects which you can apply to video clips in order to change their style or appearance. For example, you can improve the color balance of a clip, or make the video look like a painting. Filters are applied over each frame in a clip. By specifying the different start and end values, you can control the intensity and speed of a filter as it moves from the first frame to the last.

To apply a video filter to a clip in the Timeline:

1. Select a video clip in the Timeline.
2. Select the **Video Filter** folder in the **Library** or click the Storyboard menu arrow and select **Video Filter**.
3. Click a video filter in the Library to apply to the selected clip.
4. To customize a filter, click **Options** on the **Filter Tab** in the **Options Panel**. Available options depend on the selected filter.
5. Preview the result.
6. Click **Apply**.



To apply a video filter to a clip when no clip is selected:

1. Select **Video Filter** from the folder list or click the Storyboard menu arrow and select **Video Filter**.
2. While there is no video clip selected, click the video filter you want to use. It is then displayed in the **Preview Window**. Click **Play Clip** to closely observe its behavior.
3. There are two ways to apply the filter:
 - Follow a prompt in the **Options Panel** asking you to drag and drop the selected filter to a video / image / color clip on the Timeline.
 - Click **Add** and select the video / image / color clip in the Timeline to apply the filter on.
4. Click **Options** for filter customization. Available options depend on the selected filter.
5. You may also preview the result through Navigator. If you want to change the filter, click another thumbnail.

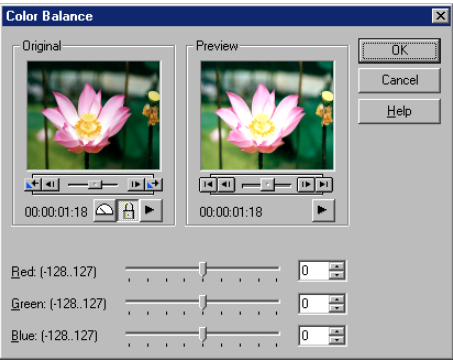
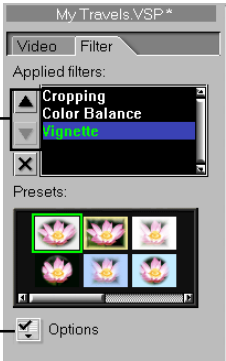
Notes:

- VideoStudio allows you to apply a maximum of five filters to a single video clip.
 - When there is more than one video filter applied to a video clip, you can change the order of filters by clicking the Shift up / down video filter buttons.
- However, the order change affects the whole appearance or style of the video clip.

Shift up / down
video filter
buttons

Advanced options
button

Add to Timeline
button



Example of a dialog box after clicking **Options**

Clicking **Options** displays a dialog box which allows you to fine tune your filter. Advanced options can be applied to the first and the last frames only in a video clip. So, drag the slider to either of these two points to adjust.

Effect

Transition effects offer creative ways to shift from one scene to the next. They are applied between clips in the Video Track and their attributes can be modified in the Options Panel to suit a specific purpose. VideoStudio studio allows you to mix and match a variety of preset effects while editing your project. Effective use of this feature can add a professional touch to your work.

Creating effects

The **Library** provides a wide range of preset transitions from cross fades to explosions. We will deal with the details of these effects later. For now, you just need a project with two video clips in it.

To add a transition:

1. Select a category of effects from the **Folder** list.
2. Scroll through the effects thumbnails in the **Library**. Select and drag an effect to the **Timeline**, roughly between two video clips. Drop your effect and it will snap into place. You can only drag and drop one clip at a time.

Note: Transitions work the same way in both the Storyboard Mode and Timeline Mode. But you may find it easier to work on transition effects in the Storyboard Mode.



Drag and drop transition effects right onto the tracks in both Storyboard Mode and Timeline Mode

Customizing effects

If you’ve tried a few simple transitions as outlined on the previous page, you really have mastered all you need to know. VideoStudio pretty much takes care of all the details to make your transitions smooth and professional. You can, however, further customize your effects after adding them to your project. The **Options Panel** displays the settings of your selected effects so that you can change their various parameters. This gives you complete control of exactly how your effects will behave in your movie.

Duration

Sets the length of time of the transition. You can also modify the duration by using the yellow Trim handles in the Timeline.

Border / Color

Select a size for the border (in pixels) on the left and choose a color by clicking the color box.

Apply

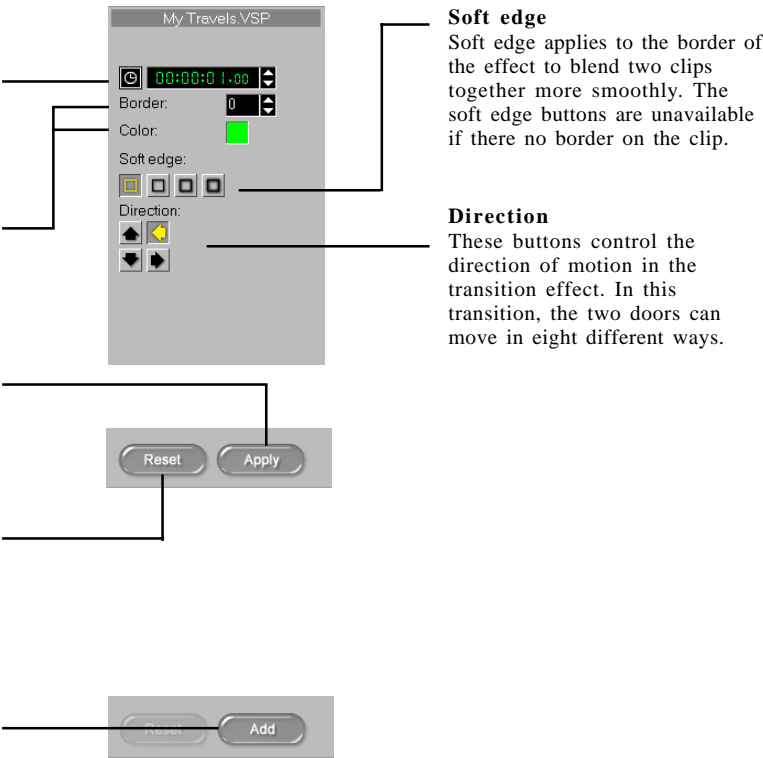
Click to apply changes made to a selected effect in the Timeline.

Reset

Click to return to previous settings if changes have not been applied. If Apply has already been clicked, use Undo to return to previous settings.

Add

Click to apply a selected transition effect. Then click between two clips in the Timeline where you want to add the effect.



Overlay

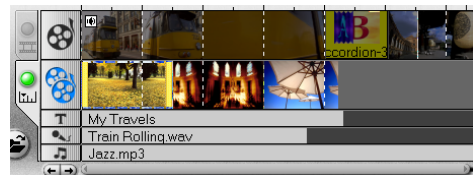
The Overlay Step provides an additional track where you can place videos and images to enhance introductions and credits. An alpha-channel is automatically applied to clips placed in this track for transparency. By using an animation style such as fade-in and fade-out, you can interweave two clips, one in the Storyboard Track and another in the Overlay Track, in one timeline. You can even have three separate clips playing simultaneously by adding a clip in the Title Track.

Inserting video/image in the Overlay track

Working in the Overlay Track is similar to working in the Storyboard Track. You can drag and drop clips and images (color clips are not available in Overlay) to arrange their order. You can also apply a motion style effect, that controls the way the overlay clip “blends” with the clips in the Video Track.

To insert a clip to the Overlay Track:

1. Select **Video/Image** in the **Folder** list or click **Load video / Load image** to browse and select a file.
2. Drag and drop the selected clip from the **Library** to the **Overlay Track** in the **Timeline**.
3. Click **Motion**, and apply a motion style to create a blending effect between the selected clip and the clip simultaneously running in the **Storyboard Track**. See *page 52*.



In Overlay, you can only use the video and image galleries. Just like in the Title Step, this step does not support drag and drop of multiple clips.

Customizing overlays

Fine tune the attributes and behavior of your overlay clips in the **Options Panel**.

Mark in / Mark out

Displays the starting / ending point of the overlay clip after trimming.

Clip volume

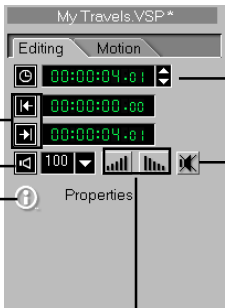
Click the arrow or enter a value to adjust volume.



Properties

Displays the attributes of a selected clip.

Note: Settings here can be applied to the whole clip or just part of it.



Duration

Sets the length of time of the overlay clip. You can also modify the duration by using the two yellow Trim handles in the Timeline.

Mute

Disables audio for the selected clip.

Fade in / out

Gradually increases / decreases the volume of the clip for a smooth transition. Click Settings and Commands: Preferences to set the fade in / fade out duration.

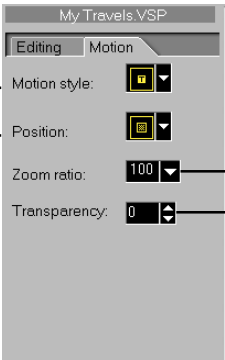
To make Overlay clips with transparent backgrounds, you can also create a 32-bit alpha channel AVI or Image file with an alpha channel. You can further achieve your desired effects by using the **Motion Tab**. Here, you can apply motion styles, set the position of your clip on the screen, magnify or reduce it, and control its transparency level.

Motion style

Click the arrow to display all available motion styles. Choosing Static superimposes the clip over the storyboard clip.

Position

Sets the placement of the video clip/image with reference to the window. You can choose from 9 set positions, or adjust the clip/ image manually.



Zoom ratio

Magnifies or reduces the video clip/image accordingly. Click the arrow or enter a value to adjust the size.

Transparency

Sets the opacity of the video clip/image. Click the arrow or enter a value to adjust transparency.

Note: These settings are applied to the whole clip.

Title

While a picture may be worth a thousand words, text effects in your video productions add clarity and comprehensibility. Besides, what production-quality movie would be complete without opening and closing credits? With VideoStudio's **Title Step**, professional-looking titles complete with animation effects can be done in minutes. Use these settings to create the look of your selected title.

Editing Tab

Each option here applies to the whole text or part of it.

Create Title

Click to create a new title clip of modify an existing one.

Font face

Use any True Type font installed on your computer.

Font size

Sets the size of the text in points.

Font style

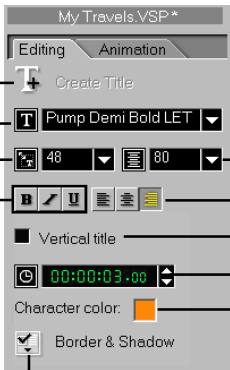
Bold, italic and underline.

Border & Shadow

Applies or removes text border and shadow effects.

Reset

Reverts to original settings.



Line spacing

Sets the spacing, or leading, between lines of text.

Alignment

Aligns horizontal text to the left, center, or right. Or, aligns vertical text to the top, center, or bottom.

Vertical title

Makes the orientation of the title vertical or horizontal.

Duration

Sets the length of time for the title clip. You can also modify the duration by using the two yellow Trim handles on the Timeline.

Character color

Sets the color of the selected text.

Apply

Applies new settings to the title clip.

Animation Tab

Each option here applies to the whole text title.

Type

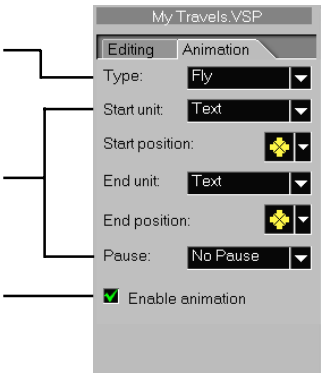
Provides a list of animation effects to choose from.

Animation options

Determine how the title enters and exits the scene. The available options vary, depending on the type of effect that is selected.

Enable animation

Applies or removes animation attribute from a title clip.



Creating text titles

Titles determine best what your production is all about. They can be used throughout your project as opening and closing credits, introduction to chapter points, scene captions, and many more. VideoStudio ensures that creating your title clips is as easy as clicking a few buttons and dragging a few clips.

To add a text title:

1. Use the **Navigator** buttons to scan your video and select the frame you want to add a title to.
2. In the **Editing Tab** in the **Options Panel**, click **Create Title** or click directly in the Preview Window.

Note: Remember that you cannot create a new title over an existing title clip.

3. Type in your title in the Preview Window and use the style buttons to customize fonts. Options are available in the **Editing Tab**.
4. To add effects to your title, switch to the **Animation Tab**. Then, select an effect from the **Type** drop-down list, and choose the desired animation options in the **Options Panel**.
5. Click **Add**.



The blue triangle represents the position of the title clip in the Timeline.

When entering a text title, a faint rectangle is visible in the Preview Window. This is the **Title safe area**, and it is the recommended maximum size for your text. Along with the rectangle, you should see a blinking cursor that indicates the starting point for text entry.

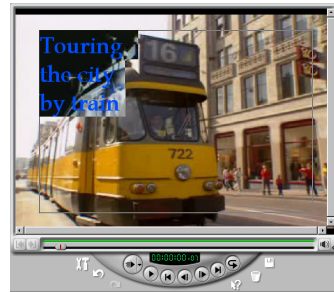
When entering text, you can press **[Backspace]** to correct mistakes and press **[Enter]** to start a new line. Move around the text with the arrow keys as needed. To change the attributes of text, first highlight the text by selecting it with your mouse and then make revisions.

To modify a text title:

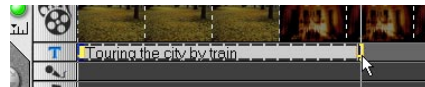
1. Click a title clip in the **Timeline**.
2. Click **Create Title** or click directly in the Preview Window to change the text.
3. Click **Apply** or move to the next step. To change the text back to its original state, click **Reset**.

Notes:

- Once a title clip has been inserted onto the Timeline, you can adjust its duration by either dragging the handles, or entering a duration value on the **Editing Tab**.
- To see how the title appears on the underlying video clip, select the title clip and then click **Play Clip** or drag the **Preview Bar** handle.
- The Library can also be used to store title clips. To add a title clip to the Library, drag it from the Timeline to the Library.



A text title being edited. Note the Title safe area around the center of the window.

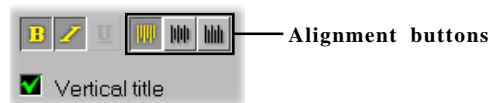


Creating vertical text titles

For added flexibility in your text layout, VideoStudio allows you add vertical text titles.

To create a vertical text title:

1. Click **Create Title** or click directly in the Preview Window to enter the text.
2. Select **Vertical title** in the **Editing Tab**.
3. Use the **Alignment** buttons to align the text to the top, center or bottom.
4. Click **Add**.



To change the orientation of the title back to horizontal, clear the **Vertical title** option.

Using the Library

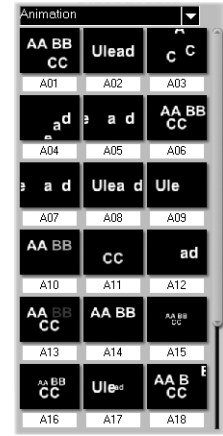
There are various ready-to-use titles in the Library which you can add to your project and preset animation effects which you can apply to your text titles.

To add a title from the Library:

1. Select **Title** from the **Folder** list. Then, drag a preset title thumbnail from the **Library** into the **Title Track**.
2. Click the Preview Window to edit the selected preset text title. Use the **Editing Tab** to enter new text or modify font styles. Use the **Animation Tab** to add animation effects to the title.
3. Click **Apply**.



Preset titles



Preset motions

To apply a preset animation effect:

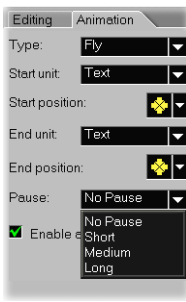
1. Select a title in the **Timeline** or create a new one.
2. Select **Animation** from the **Folder** list. Double-click a preset motion thumbnail in the **Library**.
3. Click **Apply**.

Rolling & scrolling

One of the most common and effective techniques for presenting closing credits is the rolling or scrolling credits. With VideoStudio, this is simply a matter of specifying a direction and a duration for your text. After you have entered some text and inserted it in the **Timeline**, click the title clip you have created and click the **Animation Tab**.

To scroll a text title:

1. Select a text title in the **Timeline** or create a new one.
2. On the **Animation Tab** in the **Options Panel**, select **Fly** from the **Type** drop-down list.
3. Specify how to scroll the title by choosing these animation options:
 - **Start** and **End units** Determine whether the whole title (**Text**) moves, or parts of the title (**Char**, **Word**, or **Line**) scroll one at a time.



Note: You'll end up with a number of separate, sequential title clips in the Timeline. Try adding a small space between clips for a brief pause. Anyway you do it, test your titles to ensure that they are readable in the final version of your movie. (See *page 65* for information about previewing parts of a movie.)

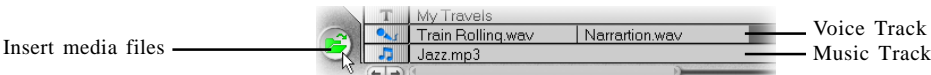
An Autotrim function also allows you to insert a title clip between two existing clips. If the space between these clips is not enough to fit your chosen clip, it will be automatically trimmed to fit the available space.



Audio

Audio in the form of music, running narration, and even a sound effect is a critical part of any video project. VideoStudio provides you with the tools to make sure your audio is as great and easy to prepare as working with video.

The **Audio Step** consists of two tracks: **Voiceover** and **Music**. Insert your narrations in the **Voice Track** and your background music or sound effects on the **Music Track**. You can even access your music files from multiple CD-ROMs simultaneously.



Details of the Timeline showing the two audio tracks with WAV and MP3 file clips

Click **Insert media files** to browse, select and insert **WAV**, **MP3**, and CD audio files stored in your hard disk. You can also store your audio clips in the Library and drag and drop them to and from the Timeline. To add additional clips, click **Load audio**.

Incidentally, the VideoStudio CD also comes with several audio clips ready for you to use. These clips are mostly short sound effects clips and can be very humorous when used in your movies, or can be used to create additional ambience.



Voiceover Tab

Record

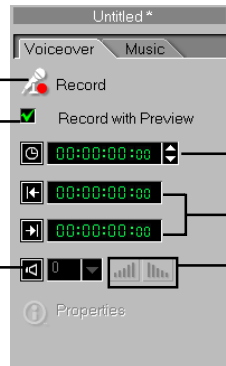
Starts the narration recording process. Clicking it again stops recording.

Record with Preview

Plays the video clip when you click **Record**. This allows you to accurately synchronize the voiceover with the video.

Volume

Click the arrow or enter a value to adjust the volume.



Duration

Sets the length of time of the narration clip. You can also modify the duration by moving the two yellow Trim handles on the Timeline.

Video mark in / out

Displays the start / end point of a narration clip after trimming.

Fade in / Fade out

Gradually increases / decreases the volume of the clip for a smooth transition. Click Settings and Commands: Preferences to set the fade in / fade out duration.

Music Tab

Disc

Displays the Compact Disc name currently loaded in the CD Drive.

Track

Displays the audio track currently playing.

Record

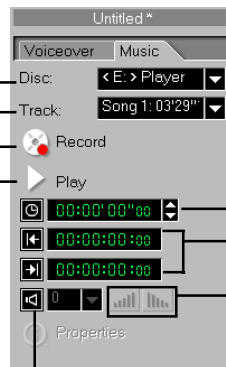
Records the audio track currently playing.

Play/Stop

Plays the selected audio CD track. Clicking it again stops playback.

Volume

Click the arrow or enter a value to adjust volume.



Duration

Sets the length of time of the music clip. You can also modify the duration by moving the two yellow Trim handles on the Timeline.

Video mark in / out

Displays the start / end point of an audio clip after trimming.

Fade in / Fade out

Gradually increases / decreases the volume of the clip for a smooth transition. Click Settings and Commands: Preferences to set the fade in / fade out duration.

Creating voiceover narration

Explaining exactly what is going on in your movie can really help your viewers understand and enjoy it better. This technique is often used in television documentaries and news stories.

Before recording a narration, always check the audio settings in Windows. For example, in Windows 98, click **Start: Programs - Accessories - Entertainment - Volume Control**. In the **Volume Control** dialog box, click **Options: Properties**. In the **Properties** dialog box, select **Recording** and in the volume controls list, select **Microphone**. Click **OK**. Make sure the **Select** option in Microphone Balance is checked. Adjust the microphone volume level.

Narrating a movie:

1. Use the **Preview Bar** to move to the section of the video you want to narrate.

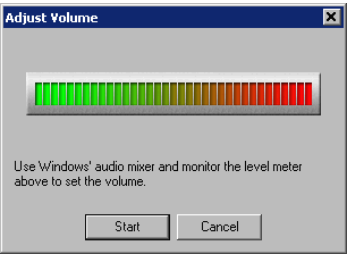
Note: You cannot record over an existing clip, so make sure none is selected by clicking on a blank section in the Voice Track.

2. Select **Record with Preview** and click **Record**. A small meter appears.
3. Speak into the microphone and check if the meter responds accordingly. Use the Windows audio mixer to adjust the level of the microphone.
4. Click **Start** and begin speaking. Watch your video play in the Preview Window to synchronize the narration with the action.
5. Click **Record** again or press **[Esc]** to stop.

Note: To record a new narration, make sure that an audio clip is not currently selected in the Audio Track. Otherwise, the Record function is disabled.



The red circle of the Record button turns into a black square when recording



Adjust Volume level meter

The easiest method of recording a narration for a video is to record in short ten or fifteen second sessions. This allows you to prepare what you are going to say more easily and to quickly fix mistakes. When you have misspoken and recorded a bad clip, just select the clip on the Timeline and delete it. Some people are comfortable doing impromptu narrations, some people prefer just an outline, and others like to have the complete text of what they want to say written out beforehand.

Creating background music

The mood of your movie is determined as much by your video as it is by the background music you use. Whether you choose Classical, Country, or Chinese folk music, the decision is entirely up to you. The source of this music can be any CD in your collection.

To use the audio from a CD in your movie, you first have to record the music you want with your computer. This creates a **WAV file**, which is the digital audio data from your CD. VideoStudio now supports a number of additional file formats, including **MP3**. MP3s are an exciting new way to share music over the Internet and there are thousands of songs available for you to download.

Recording audio from a CD

VideoStudio's audio versatility allows you to acquire music from virtually any popular audio source: WAV files, MP3s, and CD audio. Importing sounds is as easy as inserting a disc. You can choose to record a whole audio track, or you can just copy sound bites.

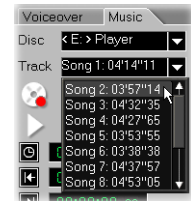
To record music from a CD:

1. Insert an audio CD to your CD-ROM.
2. Click **Audio** and select **Music**.
3. Check if both **Disc name** and **Track** are enabled to make sure that a disc is loaded.
4. Select the audio track you want to capture using **Track**.
5. Click **Record** to begin recording. To stop, click **Record** again.
6. A copy of the recorded audio will be displayed in the **Music Track**. You can edit and rename its thumbnail like any other clip.

Note: To record a new clip, make sure that there is no selected audio clip in the Audio Track. Otherwise, the Record function is disabled.



The red circle of the **Record** button turns into a black square when recording



CD track information in the Options Panel



Play changes to **Stop** when playing a CD



Selected WAV file with Trim handles

After recording a clip, the controls in the **Options Panel** change. The top numbers now represent the total **Duration** of the inserted clip. You can now trim audio clips to better fit your movie or drag and drop them from one audio track to another.



WAV file trim information

Customizing background music

You can drag and drop audio clips to move them or add them to the Library. From the Timeline, a selected audio clip has two yellow handles that can be used for trimming. Again, just grab a handle and drag it to shorten a clip, either from the beginning or end.

To trim an audio clip:

1. Click an audio clip in the **Library** or in the **Timeline**.
2. Click and drag a **Trim handle** to set the trim position.
3. Click **Apply**.
4. You can selectively play only the trimmed portion of the clip by holding **[Shift]** and clicking **Play**.

An Autotrim function also allows you to insert an audio clip between two existing clips. If the space between these clips is not large enough to fit your chosen clip, it will be automatically trimmed to fit the available space.



Trim handles beneath the Preview Window



Apply changes button

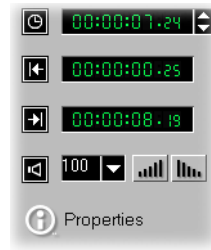


Play button

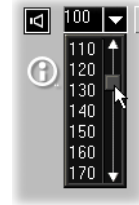
Mixing it together

VideoStudio has two separate sound tracks, one for voice and one for music. If you captured your video with sound, then in fact, you also have a third sound track that is included with the video file. This really gives you a lot of creative freedom. Vacation shots, scenery and nature videos, and movies of parties all lend themselves very well to music video style productions. Or you can combine this format with a voiceover. And when someone talks to the camera, you may want to eliminate the music altogether. The key to making this all work smoothly is to control the volume of the various clips. This is done through the Options Panel.

The control of your audio tracks is found in the Options Panel. The first control is the volume control, expressed as a percentage of the original recorded volume. Click the control to select from a range of audio amplification options: 0 to 500% (where 100% is no change and 0% will completely silence the clip). If you want a completely silent part, it is probably easiest to just delete the clip from one of the audio tracks. Any changes made with this control applies to the entire clip.



Audio controls
for a video clip



Volume amplification
control

Detail of an audio clip in the Options Panel

Note: VideoStudio provides a separate Voice Track and Music Track which you can edit separately and then mix together. You can insert any Windows audio file onto either track. Music clips can be inserted on the Voice Track and voiceover clips can be inserted on the Music Track.

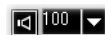
Fade

Background music that starts and ends gradually is commonly used to create smooth transitions. If you record an entire musical piece, this is probably not a problem since most of them have a beginning and ending. However, if you only want to use a portion of a musical piece, you can still seamlessly blend by using **Fade in / out** in VideoStudio.



Fade in / Fade out

Gradually increases / decreases the volume of the clip for a smooth transition. Click Settings and Commands: Preferences to set the fade in / fade out duration.



Volume

Sets the volume for the entire length of a clip. Use this control to lower the volume of the audio on a video clip so that your voiceover narration can be heard clearly above the background.

Finish

In the **Finish Step**, you can render your project into a movie file format most suitable for your audience or purpose. This section provides added information on choosing formats. Learn the procedure of creating a movie in preparation for exporting to various media. Find out also how easy it is to author a DVD title using the Ulead DVD Wizard, which is fully integrated in VideoStudio. And finally, you can preview how your final output will exactly look.

You can go directly to the Finish Step without even opening a project. That is, if you simply want to save a project file which you can work on later.

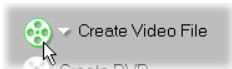
Creating and saving a video file

Click **Play Project** and select **High Quality Preview** to save or render your project at any time. But if you want to save your project as a new file with the same properties, you need to click the **Finish Step** and click **Save Project** in the **Options Panel**.

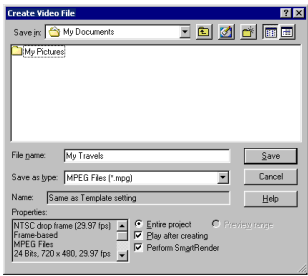
If everything has already been fine tuned, however, and you are ready to finalize your work, then you can start making your movie.

To render a movie:

1. Click **Create Video File** in the **Options Panel**. The **Create Video** dialog box appears.
2. Enter a file name for your movie. It will be saved in the format specified in your project template settings.
3. Click **Save**.



Create Video File button



Create Video dialog box for creating a video

VideoStudio’s SmartRender technology allows “changes-only” rendering which eliminates the need to re-render entire video sequences when only slight changes have been made.

Tip: Having the same settings for source video files and project saves on rendering time whenever you use **Play Project** and select **High Quality Preview**. However, the best arrangement is to use the same format and settings for source video (both captured and inserted), project, and movie template.

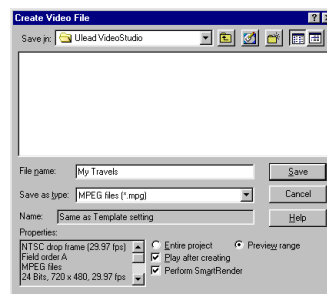
Sometimes, you just need to render a part of your project for a quick preview. This is usually done when fine tuning effects, titles, and synchronizing audio in your projects. VideoStudio lets you select a portion or range of your project to render as a preview video.

To render partially:

1. Make sure that no clips are selected (a selected clip has a broken line around it). Click the ruler at the top of the Timeline to deselect a clip.
2. The **Trim Bar** now acts on the entire project. Use the **Trim handles** to select a **Preview range**. A red line should appear in the Timeline representing the selected range. (Another way of selecting a preview range is to drag the blue triangle along the red line. Then, press **[F3]** and **[F4]** for start and end points respectively.)
3. Click **Create Video File** in the **Options Panel**.
4. In the **Create Video File** dialog box, enter a file name and then select **Preview range** instead of **Entire project**. (For more information on **Video Save Options** dialog box and recommendations, see *page 66*.)
5. Click **Save**.



Video clip with selected preview area in red



Another way to render partially is to click **Play Project** and select **High Quality Preview** while holding down **[Shift]**, even if you're not in the Finish Step. The selected range will be rendered and then played in the Preview Window. This method creates a temporary video file under the folder specified in the Preview Tab of the Preferences dialog box. To free up hard disk space, delete these from time to time by selecting **Setting and Commands: Preview Files Manager**.

Video Save Options

In the **Finish Step**, you can apply a different format and new set of attributes when saving a movie file. Click **Finish: Create Video File-Custom** to display the **Create Video File** dialog box. Here, select **Options**. This will display the **Video Save Options** dialog box where you can set your preferences.

When selecting an option, always remember to watch out for possible incompatibility problems. Available options depend on your file format. The following can help you choose options and set values for files in AVI format.

Note: You can also click **Help** for further information in the **Video Save Options** dialog box.

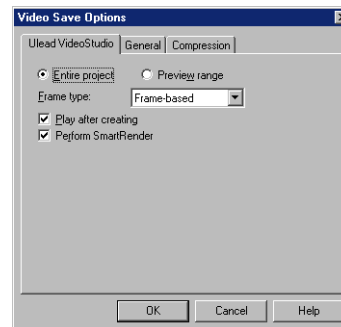
Ulead VideoStudio Tab

Select **Preview range** to render only a section of your project. Otherwise, **Entire project** is selected by default.

For computer video, a **Frame-based frame type** is commonly used.

Select **Play after creating** to watch your movie immediately after rendering your project. You can of course play your movie at any time after rendering with Windows Media Player.

Select **Perform SmartRender** to render only the most recent changes. This saves you time and hard disk space.



Video Save Options: Ulead VideoStudio

Tip: To maintain the highest possible quality and keep render times to a minimum, it is best to create your video using the same properties as when they were captured. Thus, you will need to check your captured clip's properties from time to time when choosing Video save options. To do this, right-click the clip and select **Properties**. You can also select a video clip and click **Properties** in the **Options Panel**.

General Tab

If you have a sound track/s in your project, select **Audio and Video** for the **Data track**.

Frame rate can be set anywhere between 15 and 30 frames per second. Higher frame rates result in better quality, but larger file sizes. Check your capture card manual for possible frame rate recommendation.

It is common to use 29.97 fps for NTSC video meant for viewing in a VCR in North America.

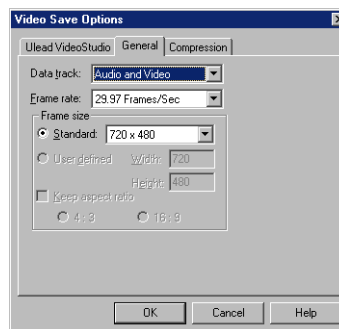
As with Frame rate, a larger **Frame size** yields a larger file size. Check your captured clip's properties and try to use the same settings.

AVI Tab

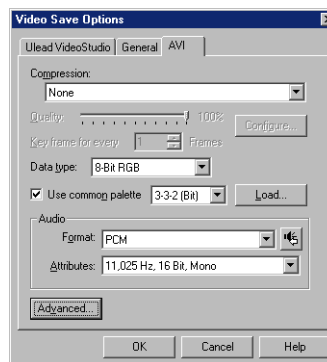
Under **Compression**, choose the **codec** or type of compression software you will use to create your video. All digital video is compressed in some way, and video clips captured to your computer are already using some kind of codec. Check your captured clip's properties, and if possible, use the same settings.

Some video capture cards record “uncompressed” video, in which case you should select **None** as the compression type (this, however, will create a very large file).

Many codecs allow you to select output **Quality** as a percentage. Some codecs allow you to set **Keyframe for every X Frames**. Lower numbers result in higher quality but longer render times.



Video Save Options: General



Video Save Options: AVI

The **Data type** is usually set by default to match your captured clips.

Audio compression can also be set, independent of video compression. Data rates are listed, so you can easily see the impact on your completed movie. Your best option is to select the audio compression used in your highest quality audio clip (usually music).

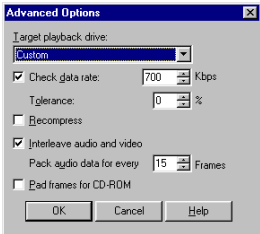
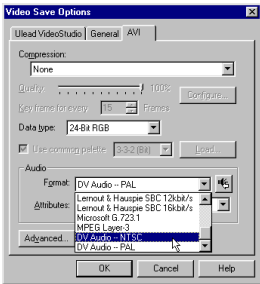
Advanced options

Click **Advanced** in the **AVI Tab** to specify a specific medium for playback.

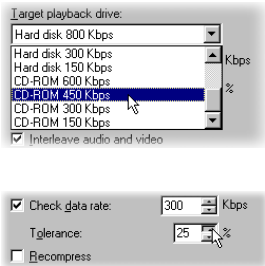
If you have a **Target playback device** in mind right now, select it from the list.

Data rate is calculated in kilobytes per second (KBps). This is the speed at which your computer can move data to and from CD-ROMs and disk drives.

You can set the **Tolerance** to let the data vary a little, otherwise VideoStudio will stop and warn you if the data rate is too high. It may well be impossible to compress 640x480 at 30 fps video down to a data rate of 150 KBps, but this depends on your video (e.g. whether it has a lot of action) and how much quality you feel you can sacrifice.



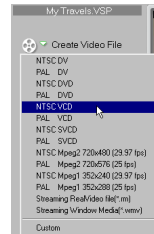
Video Save Options: Advanced



MPEG-1 file for VCD

A VCD is simply a special version of a CD-ROM. The exciting thing about this format is that it can be read by CD-ROMs, VCD players, or even DVD players.

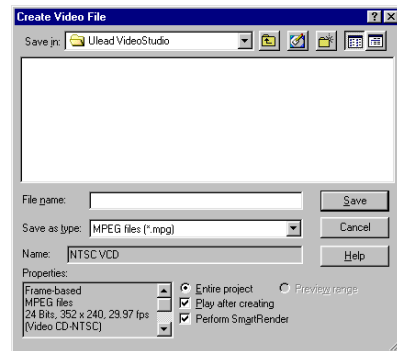
Just about any format: AVI, MPEG-1, or MPEG-2, can be played back on a computer. When you want to create a VCD file, however, you need to use a special WhiteBook standard MPEG-1 file that has *very* technical specifications. Fortunately, creating such a file is easy with Ulead VideoStudio.



Create Video File submenu displays a list of file types

To create an MPEG-1 file for VCD:

1. Open your project and click the **Finish Step**.
2. Click **Create Video File** arrow to display a submenu of file types.
3. Choose **NTSC VCD** or **PAL VCD**, depending on your TV standard. The **Create Video File** dialog box is displayed. Enter a file name and click **Save** to render your movie.



Note: MPEG-1 is a highly compressed format that maintains very good quality. Once the file is created, you can use Ulead DVD Wizard to write (burn) the CD on your CD writer. Simply follow the instructions to write your movie to the correct location on the CD. Keep in mind that the quality of your blank CD can affect the quality of your final output. Remember also that not all stand-alone players can play VCDs created on your computer.

MPEG-2 file for DVD

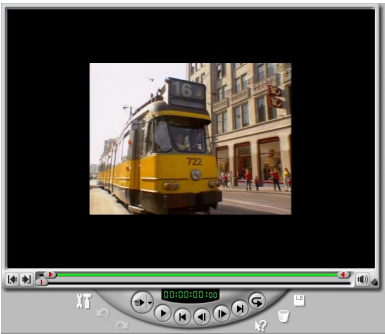
MPEG-2 is used on DVDs and digital satellite television and yields highly compressed files of extremely high quality.

MPEG-2 files and Digital Video files are of the same video resolution. NTSC MPEG-2 (DVD) is 720x480 pixels, while PAL MPEG-2 (DVD) is 720x576 pixels. Thus, MPEG-2 results in bigger file sizes compared to MPEG-1.

MPEG-2 is excellent for any type of movie. VideoStudio lets you capture directly from your camcorder to the MPEG-2 format, perform frame-accurate editing, and create a final movie in the same format. You can further use the Ulead DVD Wizard to create a DVD that can be played directly on a home DVD player or your PC's DVD-ROM.

To create an MPEG-2 file for DVD:

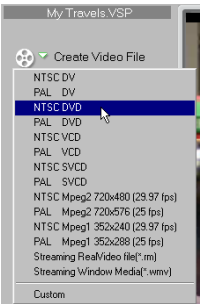
1. Open your project and click the **Finish Step**.
2. Click **Create Video File** arrow to display a submenu of file types.
3. Choose **NTSC DVD** or **PAL DVD**, depending on your TV standard. The **Create Video File** dialog box is displayed. Enter a file name and click **Save** to render your movie.



An AVI video clip displayed in the Preview Window



An MPEG-2 video clip as displayed in the Preview Window



Creating a DVD / VCD / SVCD Title

In the Finish Step, you can create a DVD / VCD / SVCD compliant MPEG file and directly output it to Ulead DVD Wizard. Click **Create DVD / Create VCD / Create SVCD** and choose between PAL and NTSC standards. The **Create Video File** dialog box will be displayed. Enter a file name and click **Save**. After the MPEG file is generated, Ulead DVD Wizard automatically launches and walks you through the process of creating a DVD / VCD / SVCD title from the MPEG video file.

Project Playback

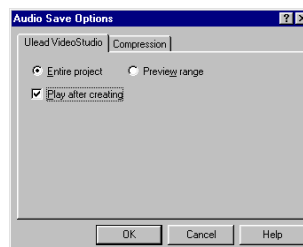
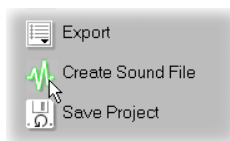
Project Playback is used to output your entire project or part of it to a DV camcorder or a video monitor. This also gives you a full screen preview of your movie either on a PC or TV monitor. Click **Project Playback** in the **Options Panel** of the **Finish Step**.

Creating an audio file

Sometimes, you want to save the audio track of your captured clips or entire video project in a separate audio file. This is especially useful when you want to use the same sound with another set of images, or when you want to convert the audio of a captured live performance into sound files. VideoStudio makes it easy for you to create an audio file of your project in MPA, RM, WAV, or MPA format.

To create an audio file:

1. Open your project and click the **Finish Step**.
2. Click **Create Sound File** to display the **Create Sound File** dialog box.
3. From the **Save as type** list, select the audio format you want to use and select **Options** to display the **Audio Save Options** dialog box.
4. Fine tune your audio attributes and click **OK**.
5. Enter a file name and click **Save**.



Exporting your movie

VideoStudio allows you to export your video files in various media formats. You can output your work in formats like DVD/VCD/SVCD, send it as an e-mail attachment, upload it to your Web page, convert it to an electronic greeting card, and even record it back to your camcorder or VCR. Exporting the output can be done by clicking **Export** in either the **Storyboard Step** or **Finish Step**.

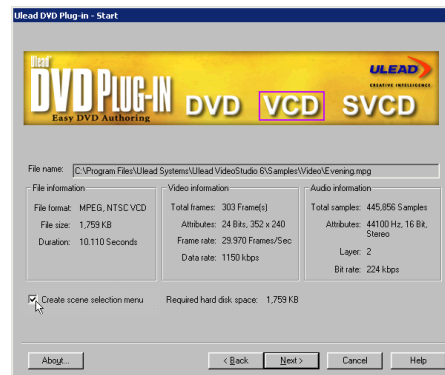
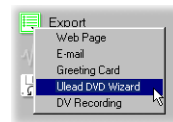
Burning DVD/VCD/SVCD

DVD has become the standard format in producing multimedia files because of its excellent quality. VideoStudio is fully integrated with the **Ulead DVD Wizard** to enable you to output your projects to DVD or VCD and SVCD complete with scene selection menus. The wizard type workflow will walk you through all the essential elements needed in DVD authoring.

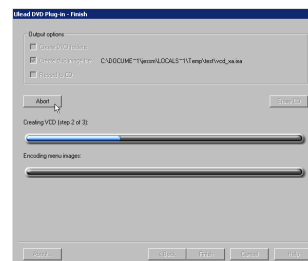
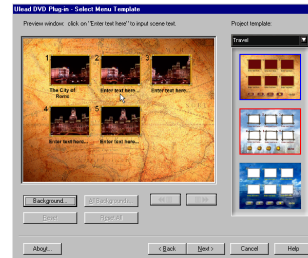
To burn your DVD/VCD/SVCD title in Ulead DVD Wizard:

1. Launch **Ulead DVD Wizard** either in the **Storyboard Step** or **Finish Step**.
In the **Storyboard Step**, click the **Video Tab** in the **Options Panel**. Then click **Export** and select **Ulead DVD Wizard**.
In the **Finish Step**, click **Export** in the **Options Panel** and select **Ulead DVD Wizard**.
2. Select **Create scene selection menu** in the **Start** dialog box. This will give your viewers instant access to specific scenes in your video. Click **Next**.

Note: If this option is not selected, you automatically go to the Playback Simulation.



3. Select scenes to use in the scene selection menu in the **Add Scenes** dialog box. Use the preview buttons to browse for scenes and click **Add** to place them in the **Scenes list**. You can select up to 99 scenes. Select **Locate scene frames** to search for I-frames only. Select **Add introduction video** to insert a video clip that will be played automatically when the disc is inserted into the player. Click **Next**.
4. Browse and select the DVD / VCD / SVCD compliant file you want to use for your introduction video in the **Add Introduction Video** dialog box. Click **Next**.
5. Select a preset template layout in the **Select Menu Template** dialog box. You can also customize the background and enter text captions. Click **Next**.
6. Use the remote control to observe the behavior of your DVD/VCD/SVCD project in the **Playback Simulation** dialog box. Click **Next**.
7. Select the folder location where to output files in the **Determine Output Options Settings** dialog box. Determine also the settings of your CD burner. Click **Next**.
8. Determine the output options you want for the video file in the **Finish** dialog box.
9. Click **Create DVD/VCD/SVCD** to start the burning process.



Putting a movie on the Web

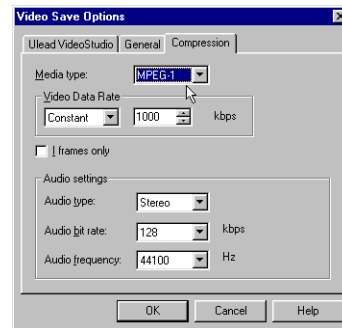
The Internet is an exciting place to share your movies, but there are a few things you need to watch out for. A short three minute vacation video can easily take up 60 MB of disk space and many hours of download time. But at a reasonable file size, viewers can download your movies on the Internet. Effective use of video on the Internet requires very high compression ratios that usually result in very low quality movies. This means your movie should use a small window (320x240 or preferably smaller), low frame rate (15 fps), and radio quality mono audio (8 bit). Videos with a lot of motion or action are not well suited to this medium.

Compressing video for the Web

When putting video on the Web, you have to consider that it is going to be played on someone else's computer. It is therefore advisable to use codecs found on many computers. **Cinepak** and **Indeo** are good choices.

MPEG-1 is the de-facto format for video on the Web. It is currently used in VCDs and provides high compression ratios without loss of quality. This is an excellent choice not only for the Internet, but for all movies that you plan to play on your PC.

Streaming video is also a good way to display video on the Internet. This allows your video to begin playing while still downloading. VideoStudio supports RealNetwork's **RealVideo** (*.RM), Microsoft's **Advanced Streaming format** (*.WMV, previously named *.ASF or *.ASX), and Apple's **QuickTime** (*.QT or *.MOV). These are the formats popularly used on the Internet.



Compression Tab in Video Save Options dialog box

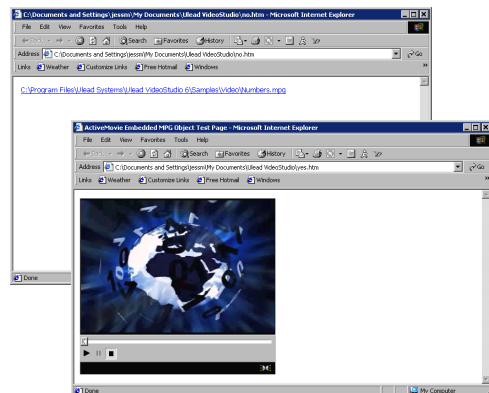
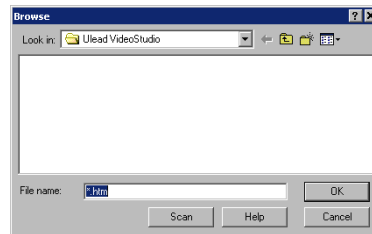
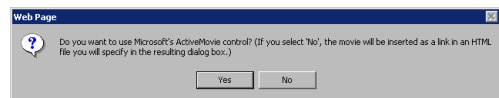
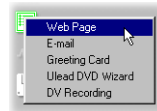
Posting your video on a Web page

After you have created a movie that is suitable for posting to the Internet, VideoStudio can assist with the task of coding the HTML document. Your default browser now opens, showing how your page looks. You can, of course, enhance this page by using your favorite HTML editor or even Windows NotePad. When you upload this page to your Web server, you need to change one line of code to reflect the relative links to the associated movie file.

To export your video on a Web page:

1. Select a video clip from the **Library**. If you want to use a project, make sure you have already rendered it using **Create Video File**.
2. Click the **Storyboard Step** or **Finish Step**.
In the **Storyboard Step**, click the **Video Tab** in the **Options Panel**. Then click **Export** and select **Web Page**.
In the **Finish Step**, click **Export** in the **Options Panel** and select **Web Page**.
3. In the prompting message, choose how the video file will be played back from the Web page.
ActiveMovie is a small plug-in for your Internet browser (standard with IE 4.0 or above) which your viewers need to install. If you choose **No**, the page will be set up with a simple link to the movie.
4. Enter a name and location for the new HTML file.
5. Click **OK**.

Your default browser will now open, displaying your page. When you upload this page to your Web server, you need to change one line of code to reflect the relative links to the associated movie file.



Samples of a simple hyperlink and ActiveMovie controls when displayed on a Web page

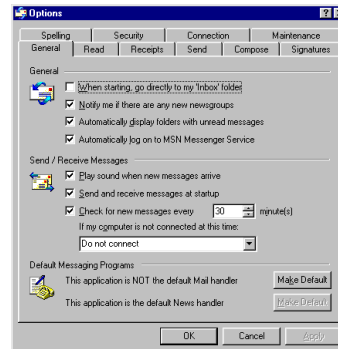
Sending a movie by E-mail

When you select E-mail, VideoStudio automatically opens your default e-mail client and inserts the selected video clip into a new message as an attachment. As with regular e-mail, enter a recipient, a subject and a message and then send your message.

If your e-mail program was not previously configured as the default e-mail client, follow the instructions below to set up your e-mail program. In MAPI-compliant programs such as Netscape Mail and Eudora, you need to enable their MAPI (Messaging Application Programming Interface) option.

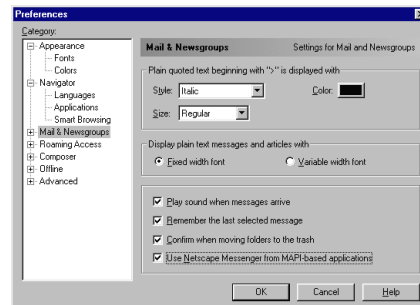
To set up Microsoft Outlook Express as your default e-mail program:

1. Select **Tools: Options**.
2. Click the **General Tab** in the Options dialog box.
3. Under **Default Messaging Programs**, click the **Make Default** button after the **This application is NOT the default Mail handler**.
4. Click **Apply**.



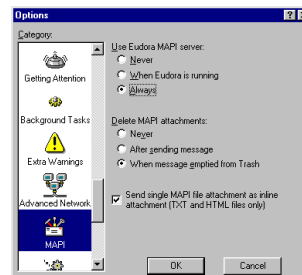
To enable MAPI in Netscape Mail:

1. Select **Edit: Preferences**.
2. Select **Mail & Newsgroups** in the **Category** list.
3. Select **Use Netscape Messenger from MAPI-based applications**.
4. Click **OK**.



To enable MAPI in Eudora:

1. Select **Tools: Options**.
2. Select **MAPI** in the **Category** list.
3. Select **Always** under **Use Eudora MAPI server**.



Electronic greeting cards

Share your video with friends and relatives by creating multimedia greeting cards. VideoStudio packs the movie into an executable (*.exe) file that automatically plays the video. In addition, you can even display your video using your choice of background.

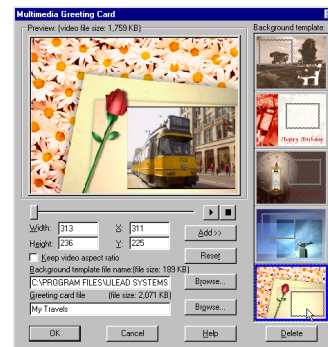
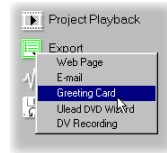
To create a greeting card:

1. Select a video clip from the **Library**. If you want to use a project, make sure you have already rendered it using **Create Video File**.
2. Click either the **Storyboard Step** or the **Finish Step**.

If you choose the former, click **Export** in the **Video Tab** and select **Greeting Card**.

You can also click **Export** in the **Options Panel** of the **Finish Step**.

3. Your video appears in a bounding box in the **Multimedia Greeting Card** dialog box. Double-click an image from the **Background template** to select it.
4. Drag the thumbnail to adjust the position. Another way is to enter X and Y axis values. You can also resize the image using the black controls around the thumbnail, or enter Width and Height values directly.
5. Enter a file name for the card in the **Greeting card file** entry box.
6. Click **OK** to create the card.



The background templates that are provided with VideoStudio are JPG image files. You can create your own templates in any graphics editor, or even use still frames captured from your movies. To do this, search for images using **Browse** next to the **Background template file name** entry box.

Recording back to a DV camcorder

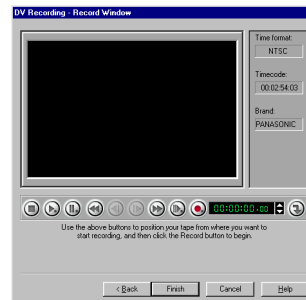
The most exciting thing about DV is that it can be copied from your camcorder to your computer, and then back to your camcorder (after editing) without any loss of quality. VideoStudio offers comprehensive support for DV in all of its manifestations on the market. This includes, but is not limited to, Type-1, Type-2, PAL, NTSC, and even the device control of your camcorder.

To record a movie to your DV camcorder:

1. Turn on your camcorder and set it to **Play** mode (or **VTR / VCR** mode). See your camcorder's manual for specific instructions.
2. Select a compatible DV AVI file from the Library. If you want to use a project, make sure you have already rendered it using **Create Video File**.
3. Click the **Storyboard Step** or the **Finish Step**.
4. Click **Export: DV Recording**.
5. The **DV Recording - Preview Window** dialog box opens. Click **Next**.
6. In the **DV Recording - Record Window** dialog box, click **DV recording** to begin recording to the DV camcorder.
7. Click **Finish**.



DV Recording - Preview Window dialog box



DV Recording - Record Window dialog box

Note: Before recording a video file back to your DV camcorder, make sure the video is saved with the correct codec. For example, the codec **DV Video Encoder - Type 1** usually works well for most NTSC DV camcorders. You can select it from the Compression Tab in the Video Save Options dialog box.

Shortcuts

Use the following keyboard shortcuts to perform commonly used operations.

| | | |
|---|------------|---|
| Start Step | [Ctrl + N] | Starts a new video project |
| | [Ctrl + O] | Displays the Open dialog box |
| Finish Step | [Ctrl + S] | Saves the current project using the same project name and overwrites the existing one. |
| Settings and Commands | [F6] | Displays the Preferences dialog box |
| | [F1] | Starts the online help |
| | [Ctrl + Z] | Undoes the last command |
| | [Ctrl + Y] | Reapplies the last undone command |
| Library | [Ctrl + C] | Copies the selected clip on the timeline or Library |
| | [Ctrl + V] | Pastes the copied clip into the Library. You can only paste a clip to a media type library similar to it. (e.g. image clip to image library) |
| Pressing [Ctrl] while selecting clips | | Allows you to select multiple clips |
| Double-clicking on Track | | Invokes the corresponding step |
| Double-clicking on Clip | | Invokes the corresponding step and selects the clip |
| Pressing [Shift] while selecting clips | | Allows you to select multiple clips in the same track or in the Library |
| Pressing [Shift] while clicking Play project - Instant playback in Navigator | | Plays the trimmed part of the clip |
| Clicking Play project-Instant playback in Navigator | | Plays the preview selection within the whole project |
| Del | | Deletes the selected area |
| Esc | | Stops capturing, recording, rendering, or closes dialog boxes without making any changes |

Need more help?

For technical support on VideoStudio, visit the following Web sites:

| | |
|----------------|---|
| America | http://support.ulead.com/ |
| Germany | http://www.ulead.de/tech/tech.htm |
| Japan | http://www.ulead.co.jp/tech/tech.htm |
| Taiwan | http://www.ulead.com.tw/tech/tech.htm |

Glossary

Analog

A signal that is not digital. Most VCRs, radio/television broadcasting, AV in/out, S-VIDEO, and stereos are analog. Computers are digital, dealing in ones and zeros. Information from an analog source must be digitized to be used on a computer.

Capture

The recording of video or images to a computer hard disk.

Clip

A short section or part of a movie. A clip can be audio, video, still images or a title.

Codec

COmpress and DECompress. All video on a computer uses a special algorithm or program to process video. This program is called a codec.

Color Clip

A simple background color used in a movie. It is often used for titles and credits since they stand out clearly against the solid color.

Compression

Making a file smaller by removing redundant data. Nearly all digital video is compressed in some way or another. Compression is achieved through a codec.

Data Rate

The amount of data per second that is transferred from one part of your computer to another. In digital video, the data rate of your source is very important: CD-ROMs have lower data rates than hard disks. The data rate of the Internet is very low.

Digital

Computer data consisting of ones and zeros. Contrast digital information with analog.

Driver

A software program that controls the connection between a specific device and a computer.

Effect

In VideoStudio, an effect is a special computer generated transition between two video clips.

Frame

A single image in a movie.

Frame Rate

The number of frames per second in a video. NTSC video is commonly 29.97 frames per second (fps), but smaller video files can be created on the computer by using lower frame rates, like 15 fps (not suitable for VCD or DVD).

Library (Ulead VideoStudio)

The Library is the repository for all of your media clips. You can store video, audio, titles, or color clips in the Library and instantly retrieve them for use in a project.

Mark In/Out

Points in a clip that have been marked for editing and trimming purposes. A section can be selected from a longer clip by setting its beginning (Mark in) and ending (Mark out).

MP3

Abbreviation of MPEG Audio Layer-3. MP3 is an audio compression technology that produces near CD audio quality at a very small file size, making it transfer quickly over the Internet.

MPEG-1

A standard for video and audio compression used in many products like VCD. For NTSC, its video resolution is 352x240 pixels at 29.97 fps. For PAL, it works at 352x288 pixels at 25 fps.

MPEG-2

A subset of MPEG-1. It's a standard for video and audio compression used in products like DVD. For NTSC DVD, its video resolution is 720x480 pixels at 29.97 fps. For PAL DVD, it works at 720x576 pixels at 25 fps.

NLE

Non Linear Editing. Conventional editing on a VCR is necessarily linear because you must access clips on a video tape in order. Computer editing can be done in any order that is convenient.

NTSC/PAL

NTSC is the video standard in North America, Japan, Taiwan, and some other regions. Its frame rate is 29.97 fps. PAL is common in Europe, Australia, New Zealand, China, Thailand, and some other Asian places, which has a frame rate of 25 fps. There are other differences. In the world of DV and DVD, NTSC has the video resolution of 720x480 pixels, while PAL has 720x576 pixels.

Plug-ins

Plug-ins are small utilities in a program that add special functions or effects. In Ulead VideoStudio, there are a few output functions that let you send videos by e-mail, create Web pages or send multimedia greeting cards.

Project File

In VideoStudio, a project file (*.VSP) contains the required information to link all associated image, audio, and video files. You need to open a project file first before starting video-editing in VideoStudio.

Render

Rendering is the process of making a finished movie from the source files in a project.

SmartRender

SmartRender technology renders only project changes, eliminating the need to re-render whole projects and enabling fast previewing.

Source

The source or origin of your media, usually a camcorder or VCR. Audio CDs are great sources for music clips.

Storyboard

A storyboard is a visual representation of your movie. Individual clips are represented as image thumbnails on the timeline.

Streaming

This is a relatively new Internet technology that allows large files to be played as they are being downloaded. Streaming is commonly used for large video and audio files.

Template

A work pattern in a software program. It includes predefined formats and settings to save user's efforts and reduce risks of making mistakes.

Timecode

The timecode of a video file is a numerical way of representing the position in a video. Timecodes can be used to make very accurate edits.

Timeline

The timeline is a graphic representation of your movie in chronological order. The relative size of clips on the timeline gives you an accurate idea of the length of your media clips.

Title

A title can be a movie title, a caption or credit. Any text, image, or video file that overlays in your movie can be referred to as titles.

Transition Effect

A transition is a method of sequencing between two video clips, like fading from one into another. In Ulead VideoStudio, there are a large variety of special transitions available, and they are called Effects.

Trim

The process of editing or cropping a movie clip. Computer video can be trimmed frame by frame.

Video Filters

A video filter is a method of changing the appearance of a video clip, like mosaic and ripple.

Voiceover

The narration of a video or movie is commonly called the voiceover. This is most notable in documentaries such as nature shows.

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